



CITY OF TSHWANE

BUILT ENVIRONMENT PERFORMANCE PLAN



Sub-Section D – Catalytic Urban Development Programme Resourcing

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D Catalytic Urban Development Programme Resourcing

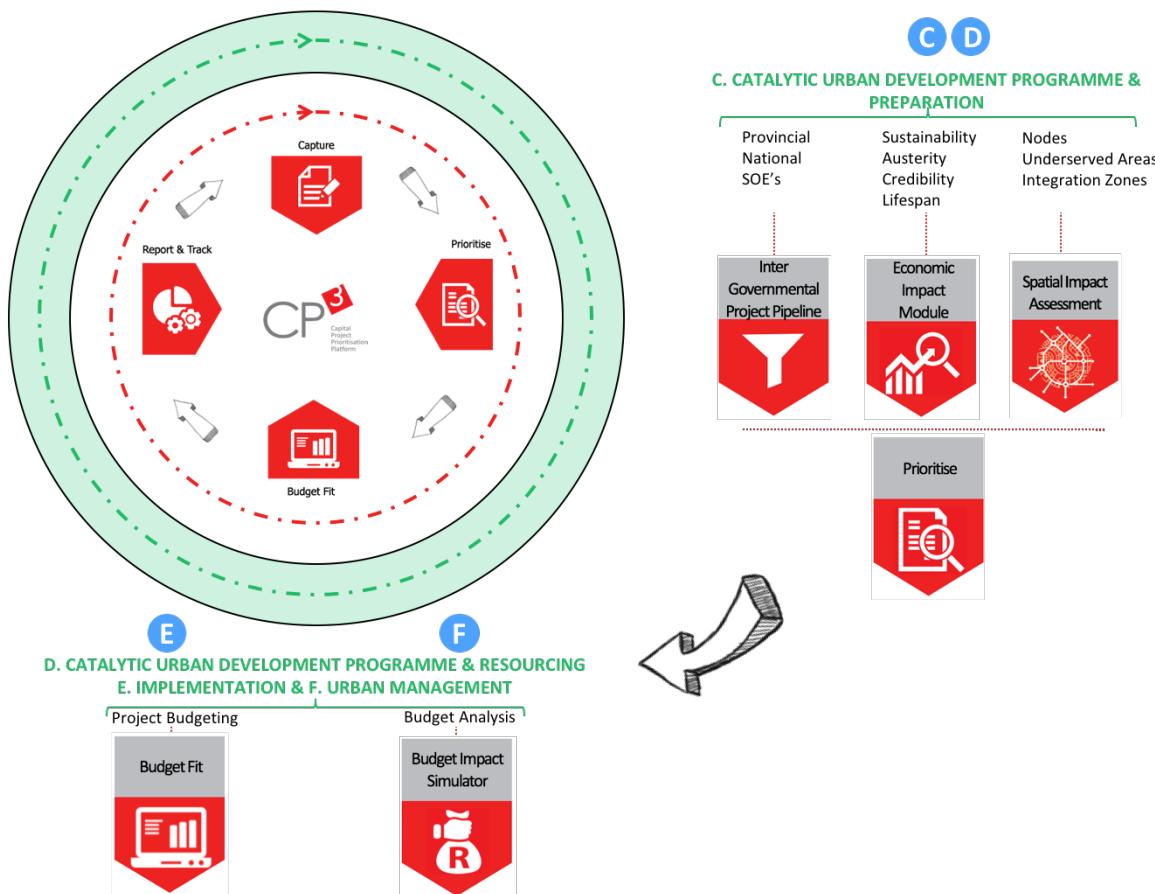


Figure D-1: Processes and tools applied for resourcing of the Catalytic Urban Development Programme

Contextualisation

Figure D-1 represents a portion of the CaPS process (refer to the Section A: Introduction). Prior to presenting resourcing of the Catalytic Urban Development Programme, attention needs to be given to the processes leading up to the Resourcing plan as displayed in Figure D-1 whereby the prioritisation of projects, inclusive of the economic impact and spatial priorities amongst others, is utilised in determining the Catalytic Urban Development Programme as well as other capital expenditure projects which would contribute to the overall strategic objectives of the City of Tshwane.

The consolidated and prioritised project book is then subjected to the budget fit process, at which time manual adjustments can be forced on the capital budget. Depending on the level of manual adjustment, the resultant budget would still be reflective of the strategic priorities of the City of Tshwane, inclusive of the Catalytic Urban Development Programme. Please refer to section B2: Planning for priority, for a detailed description of the prioritisation and budget fit processes.

The fitted budget is then included in the Budget Impact Simulator. It is important to note that the budget simulation process can also be conducted prior to the budget fit process in order

to determine the funding envelope available against which to fit the requested budget. The City of Tshwane will consider instituting this process as part of phase two of the financial strategy formulation.

The budget simulation process

It combines operating and capital budgeting, allowing for testing, what-if analysis and goal-seeking of unlimited scenarios within four pre-determined positions over a five year planning horizon (inclusive of the current year). The inclusion of historic information from 2008 further supports trend analysis and budgeting. Relevant financial policy assumptions can also be tested.

All analysis conducted are presented in report format within each of the following four pre-determined positions:

- Status Quo – it represents the forecast financial position of the City of Tshwane taking into account the current operations, all approved/committed operational and capital projects in the current year as well as all external borrowing already committed at the start of the current year;
- Inclusion of new debt only – this position builds on the Status Quo position by including the effects of any planned long term (exceeding 1 year) external borrowing on the forecast financial position;
- ¹Inclusion of planned projects only – this position builds on the Status Quo position by including the effects of all planned/non-committed operational and capital projects on the forecast financial position;
- ¹Inclusion of both new debt and planned projects – this position builds on the Status Quo position by including the effects of planned long term external borrowing as well as all planned/non-committed operational and capital projects on the forecast financial position;

A standard report is available for each position and each of the reports provide the same analysis of each position. As a result, all three of the Planned position reports are fully comparable to the Status Quo position report as well as to each other.

The analysis included in each report is presented in the same sections and across the five year forecast period. The last two historic years are also presented in order to create context. All other historic information is presented in the lever worksheets only and not as part of the reports. The following reporting and analysis sections are included in each position report:

- The cash flow forecast;
- Operational cash flow analysis;
- Liquidity position analysis;
- Borrowing position analysis;
- Operational budget funding position analysis; and
- Capital budget funding position analysis.

¹ Only applicable if budget simulation process is applied prior to budget fit.

These simulation results are then utilised to assist in, amongst others:

- Testing and setting an expanded number of policies and targets in conjunction with other municipal departments; and
- Finalising the City of Tshwane's three year budget.

Focus of this chapter

Utilising the outputs from the processes and tools described above and graphically presented in Figure D-1 the following is presented in the sections of this chapter:

- D.1: A phased approach towards creation of a long term financing strategy, taking into account the results of the Economic Impact module and the Budget Impact simulator. It is broken down into firstly, a preliminary analysis of the possible economic impact of the 2018/2019 MTREF Annexure A capital project book upon successful implementation according to the project parameters included in CaPS. Secondly, a preliminary analysis of the possible budget impact of the 2018/2019 MTREF Annexure A capital project book on the integrated financial position of the City of Tshwane. It is presented with a focus towards determining possible targets, actions and policy interventions which could be considered in the formulation of a long term financing strategy.
- D.2:
 - A possible consolidated operational and capital resourcing plan is presented, based on the current 2017/2018 MTREF budget as well as the 2018/2019 MTREF Annexure A capital budget. The resourcing plan is presented across both the Catalytic Urban Development Programme as well as other capital projects. Project specific information on CIDMS phases are not yet completed sufficiently on CaPS in order to present the information across phases of the project preparation process.
 - The Spatial Budget Mix is presented, based on the 2018/2019 MTREF Annexure A capital budget.
 - Current expenditure is presented per Integration Zone.
- D.3: The City of Tshwane's institutional arrangements in terms of the budget being informed and integrated with the strategic objectives of the metro.

D.1 Long Term Financial Sustainability

The City of Tshwane has expanded utilisation of the Capital Planning and Prioritisation tool (CaPS) by including its ancillary suite of products to assist in the formulation of a long term financing strategy which is supportive to the objective of sustainable and integrated infrastructure development.

A phased approach is being undertaken with the objective of documenting the financial strategy through setting of specific targets and actions to be implemented during the planning period. The first phase of financial strategy formulation has been achieved through utilisation of the results from the Economic Impact Module (refer to section B2: Planning for progress) as well as the Budget Impact Simulator, a tool which assists in determining the possible financial impact of all capital expenditure inclusive of the Catalytic Urban Development Programme on the medium term (current financial year plus four subsequent financial years) financial position of the City of Tshwane. Simultaneously, it assists in forecasting an optimal

and sustainable funding mix across three broad funding sources, being grants & subsidies; external borrowing and internally generated funds.

The first phase of the financial strategy formulation is focussed on a preliminary analysis of the possible economic impact of the 2018/2019 MTREF Annexure A capital budget, followed by a preliminary analysis of the results of the integrated operational and capital budgets over the medium term with a view to determining possible targets, actions and policy interventions in order to sustainably support the implementation of the Catalytic Urban Development Programme as well as all other budgeted capital expenditure required for operational sufficiency of the City of Tshwane. It is important to note that the economic impacts are considered in the budgeting process through its inclusion in the prioritisation model and process as described in section B2: Planning for priority, and depicted in Figure D-1.

Should the City of Tshwane decide to implement the use of the Budget Impact Simulator in its budgeting process, the second phase would focus on simulating the impact of various scenarios and policy interventions on the integrated operational and capital budgets with the objective of establishing a possible sustainable and integrated financial strategy.

In the third and last phase, said draft financial strategy would go through a consultative approval process after which the final approved financial strategy would be documented.

In order to formulate a fully integrated and sustainable financial strategy, the prioritisation process is aligned with the strategic priorities of the City of Tshwane. The prioritised capital budget considered in the budget impact simulations is therefore already aligned to the spatial, economic and other strategic objectives of the City of Tshwane – please refer to Figure D-1.

D.1.1 Setting of economic impact targets

Economic indicator variables are included in the prioritisation model as part of the prioritisation process (refer to section B2: Planning for prioritisation). The projected impact on these economic indicators can also be utilised to set economic impact targets, based on the possible economic impact of the 2018/2019 MTREF Annexure A capital budget, inclusive of the Catalytic Urban Development programme and other capital projects.

The projected economic impact for each project individually, per main place, as well as across the City of Tshwane, provides an indication of the possible economic impact as expressed in terms of the economic indicators upon full implementation of each of the projects within the project parameters as included in CaPS. As a result, the projected economic impact could also be utilised as economic impact targets which could form part of the long term financial strategy of the City of Tshwane.

It is important that such economic impact targets be set taking into account that they are only likely to be realised:

- Upon full implementation of the applicable projects; and
- If project implementation has been executed according to the spatial, financial and other parameters as included for each project in CaPS.

Based on the information included in CaPS for the 2018/2019 MTREF Annexure A capital budget, the assessed economic indicators as well as the likely impact on each are presented below.

D.1.1.1 Possible impact on economic activity in terms of Gross Value Added (GVA)

The projected economic impact on economic activity in terms of GVA upon implementation of the total portfolio of capital investment projects as contained in the 2018/2019 MTREF Annexure A capital budget, is presented in Table D-1 and Figure D-2.

Table D-1: Projected economic impact on GVA across the City of Tshwane

Proposed Budget		<i>Indicator</i> <i>Sub-Indicator</i>	Production Output in terms of Gross Value Added (GVA at basic)		
			GVA Value	GVA Growth	GVA/CAPEX
			<i>Production output of all firms</i>		
			<i>Additional business created (additional output by firms across all industries)</i>	<i>Percentage additional business created (additional percentage output by firms across all industries)</i>	<i>Additional business generated for every Rand capital spending (for firms across all industries)</i>
Project/ Programme	Capital Programmes	Capital Investment	Rands, current prices	Percentage	Output per 1 Rand capital spending
P001	MTREF BUDGET 2018/19 Annexure A	12 056 312 617	↑ R 15 350 978 887	↑ 4,00%	↑ R1,273

An analysis of the projected economic impact presents a possible additional production of R15,3bn across all industries upon full implementation of the total capital project portfolio. This amount represents the total net impact of the capital investment i.e. taking into account both the benefits and costs of the capital project portfolio. The possible additional production represents a 4% increase in the economic activity (production output) upon full implementation of the capital project portfolio. The project portfolio may therefore create an additional R1,27 value of production for every Rand capital investment.

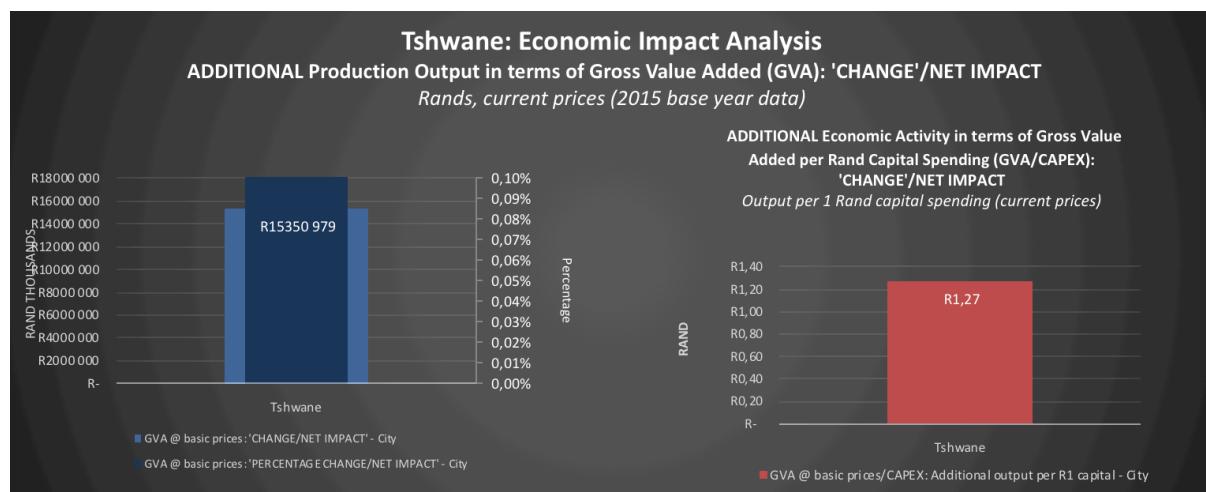


Figure D-2: Possible additional production output in terms of GVA across the City of Tshwane

The projected economic impact per main place upon implementation of the total portfolio of capital investment projects as contained in the 2018/2019 MTREF Annexure A capital budget is presented in Table D-2 and Figure D-3.

Table D-2: Projected economic impact on GVA per main place

Tshwane		Funding					Indicator	Production Output in terms of Gross Value Added (GVA at basic prices)		
		Grants and subsidies	Bonds & Loans	Internal funding	PPP	Capital Investment		GVA Value	GVA Growth	GVA/CAPEX
Project ID	Project Impact area							Production output of all firms		Output per 1 Rand capital spending
								Additional business created (additional output by firms across all industries)	Percentage additional business created (additional percentage output by firms across all industries)	
P001	Akasia	R 290 236 808	R 76 488 346	R 18 424 114	R	R 385 149 268	R 679 644 750	8,11%	R 1,765	
	Amadubele A Lebolo	R 184 841 670	R 106 882 321	R 7 341 057	R	R 299 065 048	R 538 048 346	14,59%	R 1,799	
	Atteridgeville	R 37 191 041	R 19 091 592	R 6 436 575	R	R 62 719 208	R 112 564 045	2,56%	R 1,795	
	Bronkhorstspruit	R 176 746 416	R 210 657 969	R 104 401 994	R	R 491 806 380	R 817 585 849	4,49%	R 1,662	
	Centurion	R 507 969 704	R 252 216 295	R 141 179 121	R	R 901 365 119	R 1 241 595 518	2,32%	R 1,377	
	City of Tshwane Metro	R 748 494 353	R 184 807 623	R 127 030 381	R	R 1 060 332 357	R 1 883 135 374	25,94%	R 1,776	
	Cullinan	R 11 674 380	R 18 349 664	R 19 384 472	R	R 49 408 516	R 88 640 082	1,95%	R 1,794	
	Ekandustria	R 23 100	R 20 261	R 12 251	R	R 55 612	R 101 950	0,95%	R 1,833	
	Ga-Rankwaa	R 251 579 306	R 42 247 972	R 12 720 838	R	R 306 548 114	R 542 387 398	6,62%	R 1,769	
	Hammanskraal	R 14 794 153	R 5 428 758	R 2 329 492	R	R 22 552 403	R 41 141 441	3,80%	R 1,824	
	Knopjelagte	R 783 560	R 814 259	R 344 605	R	R 1 942 423	R 3 559 320	3,65%	R 1,832	
	Kungwini Local Municipality	R 346 123 156	R 188 820 847	R 83 451 610	R	R 610 397 613	R 1 063 548 037	10,14%	R 1,742	
	Mabopane	R 434 049 946	R 261 752 592	R 126 555 056	R	R 822 357 594	R 1 394 537 279	8,90%	R 1,696	
	Mamelodi	R 370 470 030	R 316 702 975	R 74 508 086	R	R 761 681 392	R 1 212 377 772	4,73%	R 1,592	
	Nellipapies	R 77 172 520	R 30 815 880	R 9 306 187	R	R 117 294 588	R 210 672 104	4,84%	R 1,796	
	Nokeng tsa Taemane Local Municipality	R 69 653 570	R 60 831 795	R 6 807 831	R	R 137 293 196	R 245 096 797	4,99%	R 1,785	
	Olievenhoutbosch	R 16 301 393	R 22 405 260	R 11 855 087	R	R 50 561 740	R 91 268 690	3,05%	R 1,805	
	Pretoria	R 2 393 889 251	R 1 120 328 399	R 371 844 846	R	R 3 886 162 296	R 1 781 419 098	1,13%	R 0,458	
	Rayton	R 13 563 882	R 50 470 684	R 7 317 113	R	R 7 315 679	R 126 519 424	2,40%	R 1,773	
	Saulspoort	R 33 881 416	R 75 755 248	R 17 913 302	R	R 127 549 966	R 220 408 608	2,24%	R 1,728	
	Soshanguve	R 508 120 944	R 690 194 546	R 54 966 799	R	R 1 253 282 289	R 1 922 815 067	6,76%	R 1,534	
	Tembisa	R 234 598 496	R 262 257 849	R 9 879 140	R	R 506 735 485	R 899 896 280	16,20%	R 1,776	
	Tirisano	R 20 958 291	R 98 823 496	R 10 918 545	R	R 130 700 332	R 234 015 657	6,44%	R 1,790	
	City total (t)	R 6 743 219 687	R 4 088 164 431	R 1 224 928 499	R	R 12 056 312 617	R 15 350 978 887	4,00%	R 1,273	

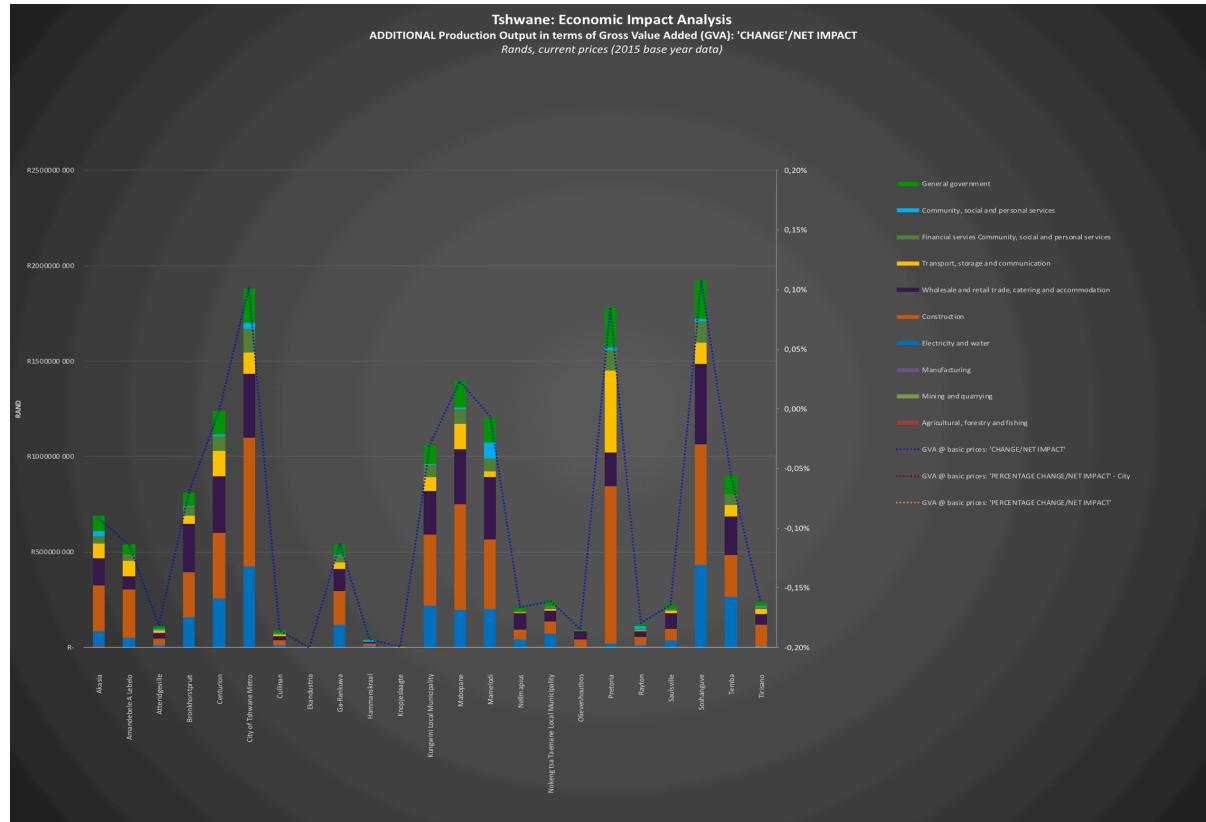


Figure D-3: Possible additional production output in terms of GVA per main place

Changes in GVA Value and GVA Growth are presented in absolute values and are therefore not comparable between main places. GVA\CAPEX is normalised in terms of capital investment in order to establish comparability between the possible impact on production output in terms of GVA per main place.

The comparable results are presented graphically in Figure D-4.

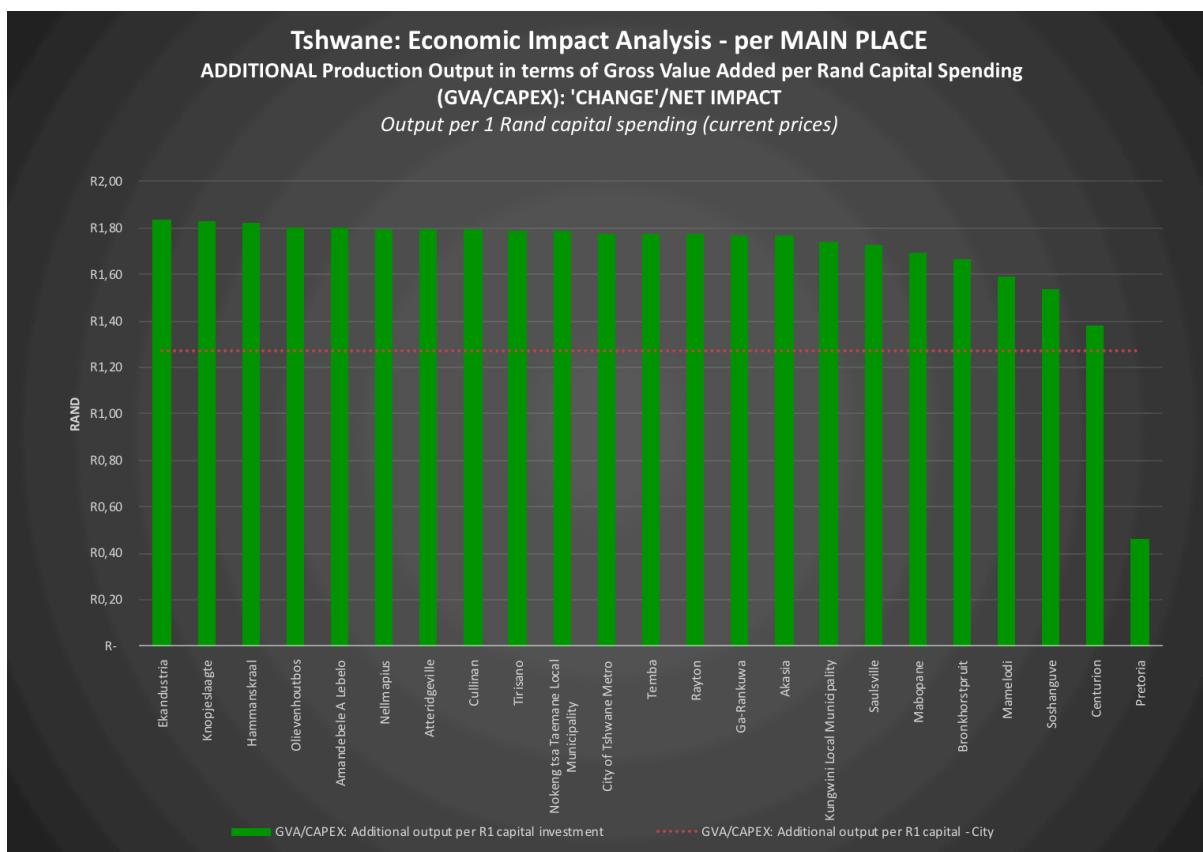


Figure D-4: GVA/CAPEX per main place

D.1.1.2 Possible impact on economic activity in terms of Gross Domestic Product (GDP)

The projected economic impact on economic activity in terms of GDP upon implementation of the total portfolio of capital investment projects as contained in the 2018/2019 MTREF Annexure A capital budget, is presented in Table D-3 and Figure D-5.

Table D-3: Projected economic impact on GDP across the City of Tshwane

Proposed Budget	Indicator		Economic Activity (Income) in terms of Gross Domestic Product (GDP)		
	Sub-Indicator	GDP Value	GDP Growth	GDP/CAPEX	
		Production output of all firms			
		Additional income created for whole economy (firms, households and government) - after net indirect taxes (taxes - subsidies on products)	Percentage additional business created (additional percentage output by firms across all industries)	Additional income/economic activity generated for every Rand capital spending (for whole economy - firms, households and government)	
Project/ Programme	Capital Programmes	Capital Investment	Rands, current prices	Percentage	Income per 1 Rand capital spending
P001	MTREF BUDGET 2018/19 Annexure A	12 056 312 617	↑ R 25 202 331 915	↑ 6,24%	↑ R2,090

An analysis of the projected economic impact presents a possible generation of an additional income of R25.2bn for the whole economy upon full implementation of the total capital project portfolio. The amount represents the total net impact of the investment i.e. taking into account both the benefits and the costs of the capital project portfolio. The projected additional income presents a 6.2% increase in the economic activity (income) upon full implementation of the capital project portfolio. The project portfolio may therefore create an additional R2,09 income for every Rand capital investment.

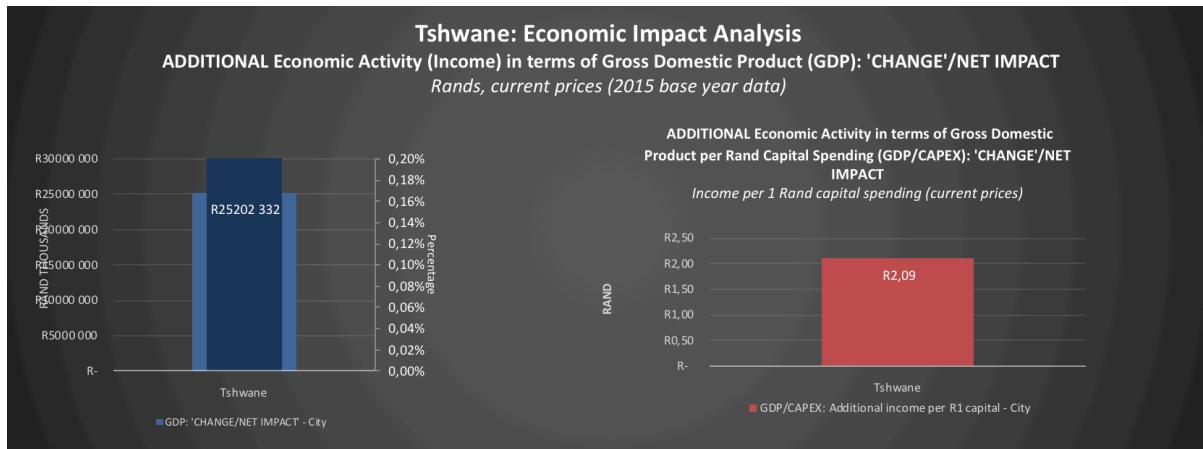


Figure D-5: Possible additional income in terms of GDP across the City of Tshwane

The projected economic impact per main place upon implementation of the total portfolio of capital investment projects as contained in the 2018/2019 MTREF Annexure A capital budget is presented in Table D-4 and Figure D-6.

Table D-4: Projected economic impact on GDP per main place

Tshwane		Funding				Capital Investment	Rands, current prices	Percentage	Income per 1 Rand capital spending
Project ID	Project Impact area	Grants and subsidies	Bonds & Loans	Internal funding	PPP				
P001	Akasia	R 290 336 808	R 76 488 346	R 18 424 114	R -	R 385 149 268	R 931 070 146	10,51%	R 2,417
	Amandebеле A Lebolo	R 184 841 670	R 106 882 321	R 7 341 057	R -	R 299 065 048	R 728 613 770	19,03%	R 2,436
	Atteridgeville	R 37 191 041	R 19 091 592	R 6 435 575	R -	R 62 719 208	R 152 807 283	3,28%	R 2,436
	Bronkhorstpruit	R 176 746 416	R 210 657 969	R 104 401 994	R -	R 491 806 380	R 1 158 540 012	6,13%	R 2,356
	Centurion	R 507 969 704	R 252 216 295	R 141 179 121	R -	R 901 365 119	R 1 978 556 668	3,54%	R 2,195
	City of Tshwane Metro	R 748 494 353	R 184 807 623	R 127 030 381	R -	R 1 060 332 357	R 2 577 414 907	34,16%	R 2,431
	Cullinan	R 11 674 380	R 18 349 664	R 19 384 472	R -	R 49 408 516	R 120 823 834	2,50%	R 2,445
	Ekandustria	R 23 100	R 20 261	R 12 251	R -	R 55 612	R 136 913	1,26%	R 2,462
	Ga-Rankuwa	R 251 579 300	R 42 247 972	R 12 720 835	R -	R 306 548 114	R 742 763 697	8,62%	R 2,423
	Hammanskraal	R 14 794 153	R 5 428 758	R 2 329 492	R -	R 22 552 403	R 55 396 069	4,80%	R 2,456
	Knopjieslaagte	R 783 560	R 814 259	R 344 605	R -	R 1 942 423	R 4 781 062	4,71%	R 2,461
	Kungwini Local Municipality	R 346 125 156	R 180 820 847	R 83 451 610	R -	R 610 397 613	R 1 468 842 665	13,49%	R 2,406
	Mabopane	R 434 049 946	R 261 752 592	R 126 555 056	R -	R 822 357 594	R 1 954 709 776	11,84%	R 2,377
	Mamelodi	R 370 470 330	R 316 702 975	R 74 508 086	R -	R 761 681 394	R 1 742 210 771	6,55%	R 2,287
	Nellmapius	R 77 172 520	R 30 815 880	R 9 306 187	R -	R 117 294 588	R 285 942 589	6,30%	R 2,438
	Nokeng tsa Taemane Local Municipality	R 69 653 570	R 60 831 795	R 6 807 831	R -	R 137 293 196	R 332 793 553	6,36%	R 2,424
	Olievenhoutbosch	R 16 301 393	R 22 405 260	R 11 855 087	R -	R 50 561 740	R 123 616 347	4,01%	R 2,445
	Pretoria	R 2 393 989 251	R 1 120 328 199	R 371 844 846	R -	R 3 886 162 296	R 6 055 266 633	3,63%	R 1,558
	Rayton	R 13 563 882	R 50 470 684	R 7 317 113	R -	R 71 351 679	R 171 978 758	3,07%	R 2,410
	Saulsville	R 33 881 416	R 75 755 248	R 17 913 302	R -	R 127 549 966	R 303 663 642	2,92%	R 2,381
	Soshanguve	R 508 120 944	R 690 194 546	R 54 966 799	R -	R 1 253 282 289	R 2 772 203 316	9,22%	R 2,212
	Tembisa	R 234 598 496	R 262 257 849	R 9 879 140	R -	R 506 735 485	R 1 223 279 908	21,01%	R 2,414
	Tirisano	R 20 958 291	R 98 823 496	R 10 918 545	R -	R 130 700 332	R 316 919 598	8,38%	R 2,425
City total (t)		R 6 743 219 687	R 4 088 164 431	R 1 224 928 499	R -	R 12 056 312 617	R 25 202 331 915	6,24%	R 2,090

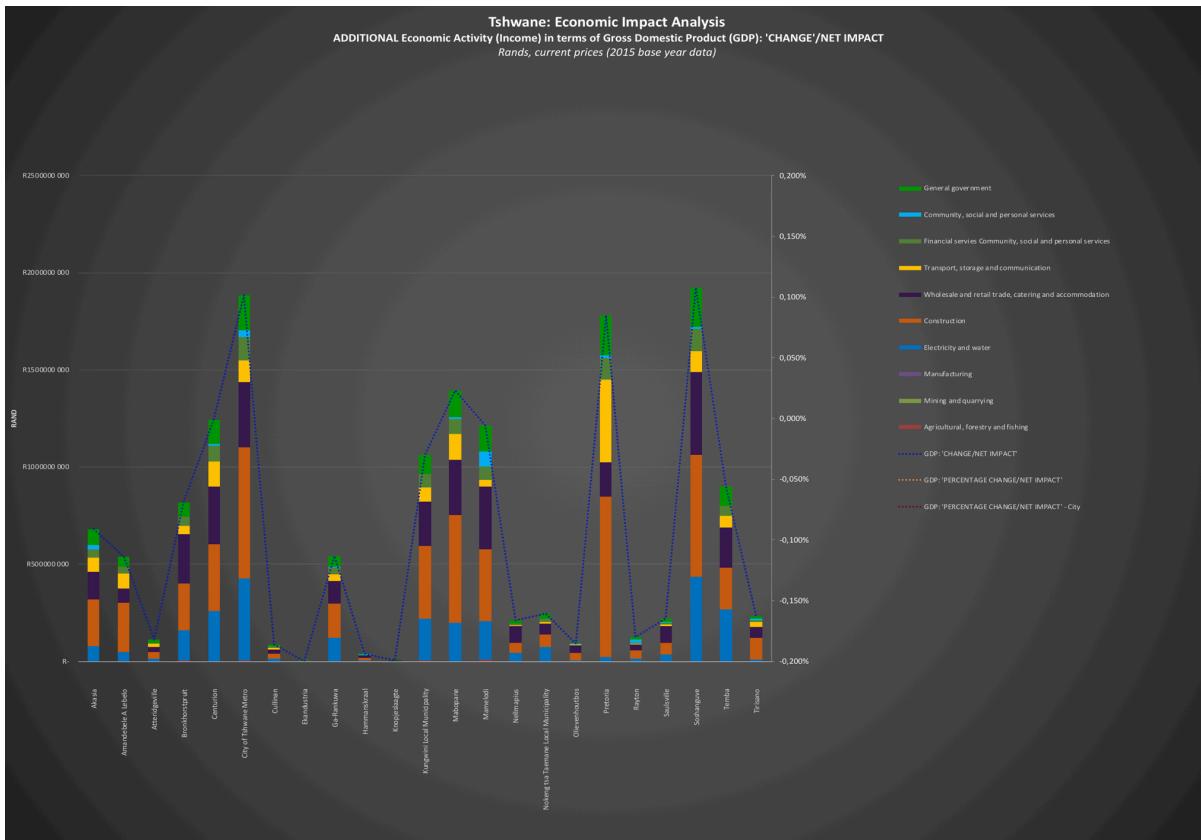


Figure D-6: Possible additional income in terms of GDP per main place

Changes in GDP Value and GDP Growth are presented in absolute values and are therefore not comparable between main places. GDP\CAPEX is normalised in terms of capital investment in order to establish comparability between the possible impact on income in terms of GDP per main place. The comparable results are presented graphically in Figure D-7.

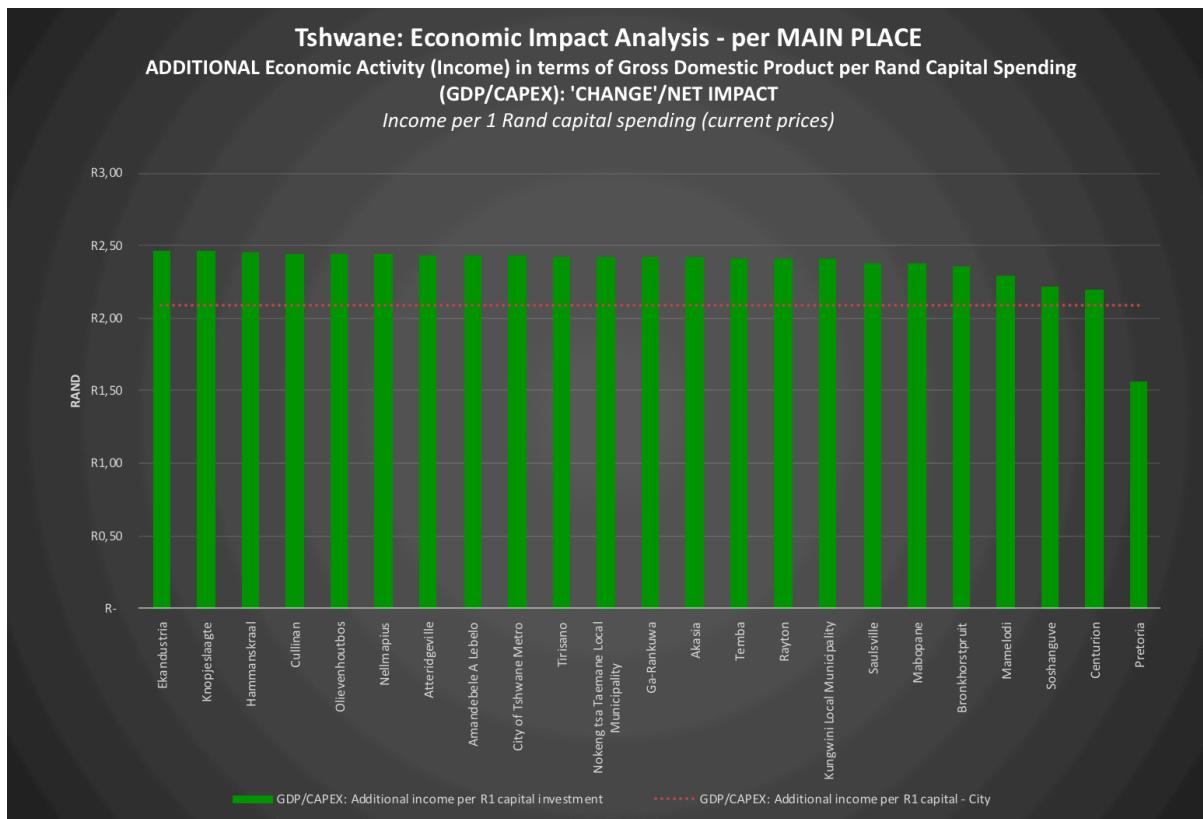


Figure D-7: GDP/CAPEX per main place

D.1.1.3 Possible impact on Job Creation and Employment (Job Absorption)

The projected economic impact on Job Creation and Employment upon implementation of the total portfolio of capital investment projects as contained in the 2018/2019 MTREF Annexure A capital budget, is presented in Table D-5 and Figure D-8.

Table D-5: Projected economic impact on Job Creation and Employment across the City of Tshwane

Project/ Programme	Capital Programmes	Capital Investment	Indicator		Job creation		Employment	
			Sub-Indicator	New Jobs (number)	New Jobs (growth)	Jobs per R1m capital spending	New Employees (number)	New Employees (growth)
				Income/economic activity of the whole economy: job opportunities			Income/economic activity of the whole economy: job absorption	
Proposed Budget			Additional number of job opportunities created across all industries	Growth in job opportunities created across all industries	Number of additional job opportunities created for every R1 million Rand capital spending (across all industries)	Additional number of labour absorbed, i.e. employed across all industries	Growth in labour absorbed, i.e. employed across all industries	Number of additional jobs absorbed, i.e. labour employed for every R1 million Rand capital spending (across all industries)
Project/ Programme	Capital Programmes	Capital Investment	Number	Percentage	Jobs per Rand million capital spending	Number	Percentage	Employees per Rand million capital spending
P001	MTREF BUDGET 2018/19 Annexu	12 056 312 617	238 399	17,77%	20	71 520	5,33%	6

An analysis of the projected economic impact presents a potential generation of an additional 238,399 jobs for the whole economy upon full implementation of the total capital project portfolio. This number of job opportunities represents the total net impact of the investment i.e. taking into account both new jobs and job losses as a result of the capital project portfolio. However, of these new job opportunities, only 71,520 people (workers) are expected to be absorbed and employed in the labour market due to skills misalignment and other structural problems. The projected additional jobs represent a 17.77% increase in job creation and 5.33% increase in employment upon full implementation of the capital project portfolio. The project portfolio may therefore create an additional 20 jobs and 6 new employees (entrants to the labour market) for every Rand capital investment in the economy.

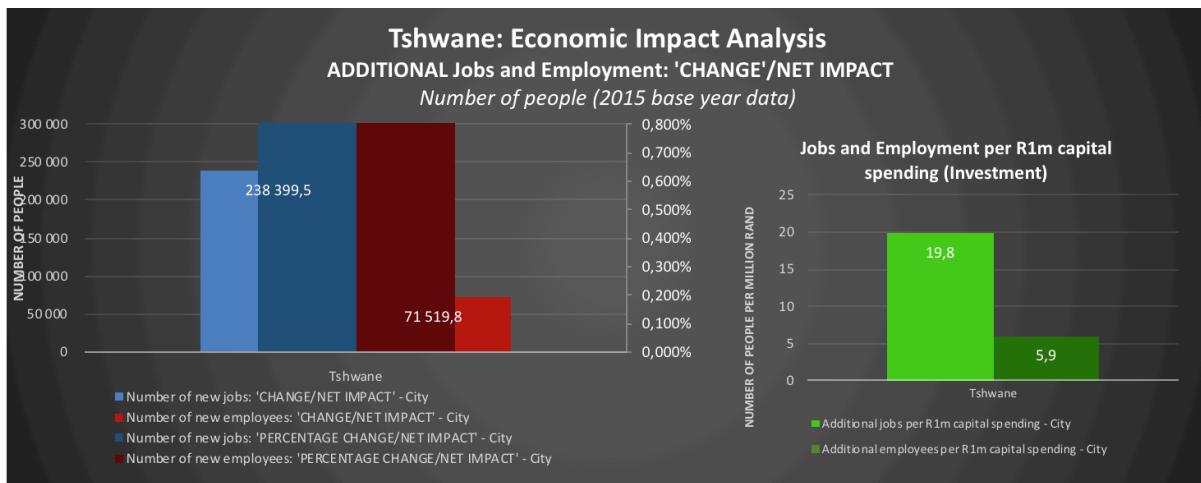


Figure D-8: Possible additional jobs and employment across the City of Tshwane

The projected economic impact per main place upon implementation of the total portfolio of capital investment projects as contained in the 2018/2019 MTREF Annexure A capital budget is presented in Table D-6, Table D-7 and Figure D-9.

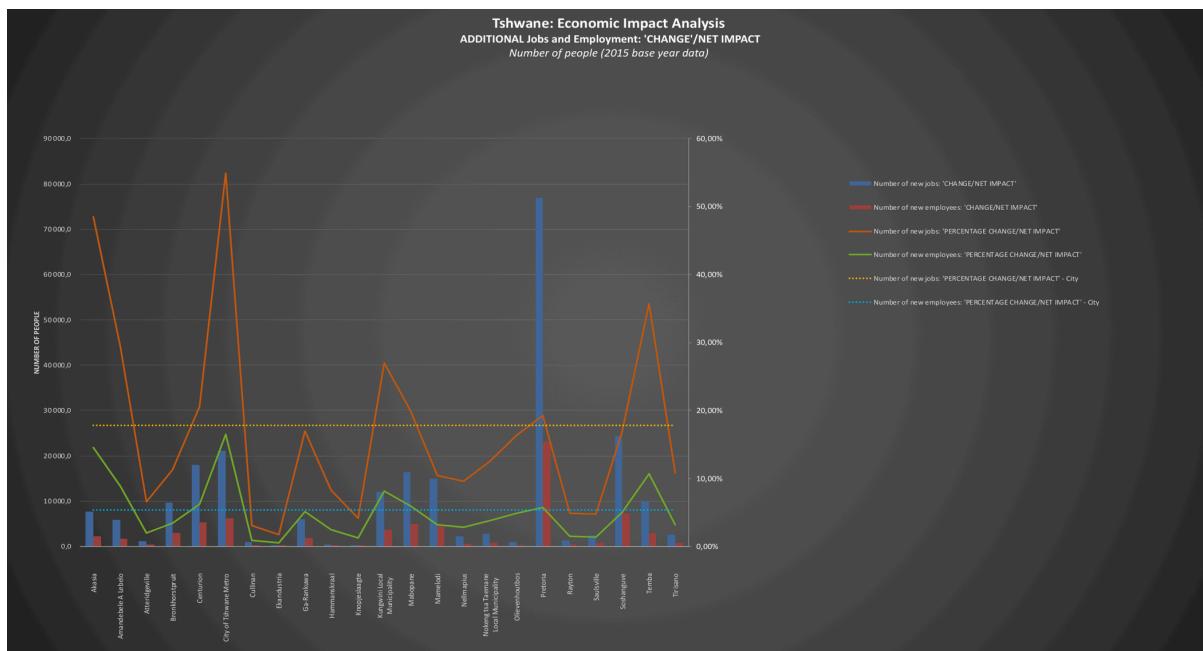
Table D-6: Projected economic impact on job creation per main place

Tshwane		Funding				Indicator Sub-Indicator	Job creation		
Project ID	Project impact area	Grants and subsidies	Bonds & Loans	Internal funding	PPP		New Jobs (number)	New Jobs (growth)	Jobs per R1m capital spending
							Additional number of job opportunities created across all industries	Growth in job opportunities created across all industries	Number of additional job opportunities created for every million Rand capital spending (across all industries)
P001	Akasia	R 290 236 808	R 76 488 346	R 18 424 114	R	R 385 149 268	7 640,6	48,56%	20
	Amandebele A Lebelo	R 184 841 670	R 106 882 321	R 7 341 057	R	R 299 065 048	5 923,5	29,41%	20
	Atteridgeville	R 37 191 041	R 19 091 592	R 6 436 575	R	R 62 719 208	1 244,0	6,52%	20
	Bronkhorstspruit	R 176 746 416	R 210 657 969	R 104 401 994	R	R 491 806 380	9 764,1	11,25%	20
	Centurion	R 507 969 704	R 252 216 295	R 141 179 121	R	R 901 365 119	17 935,5	20,57%	20
	City of Tshwane Metro	R 748 494 353	R 184 807 623	R 32 030 383	R	R 1 060 332 357	21 079,1	54,86%	20
	Cullinan	R 11 674 380	R 18 349 664	R 19 384 472	R	R 49 408 516	984,7	3,07%	20
	Ekandustria	R 23 100	R 20 261	R 12 251	R	R 55 612	1,1	1,80%	20
	Ga-Rankuwa	R 251 579 306	R 42 247 972	R 12 720 835	R	R 306 548 814	6 085,9	16,59%	20
	Hammanskraal	R 14 794 153	R 5 428 758	R 2 329 492	R	R 22 552 403	447,4	8,31%	20
	Knopjieslaagte	R 783 560	R 814 259	R 344 605	R	R 1 942 423	38,5	4,17%	20
	Kungwini Local Municipality	R 346 125 156	R 180 820 847	R 83 451 610	R	R 610 397 613	12 117,7	27,03%	20
	Mabopane	R 434 049 946	R 261 752 592	R 126 555 056	R	R 822 357 594	16 337,2	20,03%	20
	Mamelodi	R 370 470 330	R 316 702 975	R 74 508 086	R	R 761 681 392	14 988,1	10,48%	20
	Nellmapius	R 77 172 520	R 30 815 880	R 9 306 187	R	R 117 294 588	2 326,5	9,63%	20
	Nokeng tsa Taemane Local Municipality	R 69 653 570	R 60 831 795	R 6 807 831	R	R 137 293 196	2 717,8	12,46%	20
	Olievenhoutbosch	R 16 301 393	R 22 405 260	R 11 855 087	R	R 50 561 740	1 003,1	16,31%	20
	Pretoria	R 2 393 989 251	R 1 120 328 199	R 371 844 846	R	R 3 886 162 296	76 902,8	19,25%	20
	Rayton	R 13 563 882	R 50 470 684	R 7 317 113	R	R 71 351 679	1 408,5	4,90%	20
	Saulsville	R 33 881 416	R 75 755 248	R 17 913 302	R	R 127 549 966	2 516,48	4,70%	20
	Soshanguve	R 508 120 944	R 690 194 546	R 54 966 799	R	R 1 253 282 289	24 345,0	16,89%	19
	Temba	R 234 598 496	R 262 257 849	R 9 879 140	R	R 506 735 485	10 011,4	35,70%	20
	Tirisano	R 20 958 291	R 98 823 496	R 10 918 545	R	R 130 700 332	2 580,2	10,78%	20
	City total (t)	R 6 743 219 687	R 4 088 164 431	R 1 224 928 499	R	R 12 056 312 617	238 399,5	17,78%	20

Table D-7: Projected economic impact on employment per main place

Tshwane		Funding				Indicator Sub-Indicator	Employment		
Project ID	Project impact area	Grants and subsidies	Bonds & Loans	Internal funding	PPP		New Employees (number)	New Employees (growth)	Employees per R1m capital spending
							Additional number of labour absorbed, i.e. employed across all industries	Growth in labour absorbed, i.e. employed across all industries	Number of additional jobs absorbed, i.e. labour employed for every million Rand capital spending (across all industries)
P001	Akasia	R 290 236 808	R 76 488 346	R 18 424 114	R	R 385 149 268	2 292,2	14,57%	6
	Amandebele A Lebelo	R 184 841 670	R 106 882 321	R 7 341 057	R	R 299 065 048	1 777,1	8,82%	6
	Atteridgeville	R 37 191 041	R 19 091 592	R 6 436 575	R	R 62 719 208	373,2	1,96%	6
	Bronkhorstspruit	R 176 746 416	R 210 657 969	R 104 401 994	R	R 491 806 380	2 929,2	3,38%	6
	Centurion	R 507 969 704	R 252 216 295	R 141 179 121	R	R 901 365 119	5 380,66	6,17%	6
	City of Tshwane Metro	R 748 494 353	R 184 807 623	R 32 030 383	R	R 1 060 332 357	6 323,7	16,46%	6
	Cullinan	R 11 674 380	R 18 349 664	R 19 384 472	R	R 49 408 516	295,4	0,92%	6
	Ekandustria	R 23 100	R 20 261	R 12 251	R	R 55 612	0,3	0,54%	6
	Ga-Rankuwa	R 251 579 306	R 42 247 972	R 12 720 835	R	R 306 548 814	1 825,8	5,10%	6
	Hammanskraal	R 14 794 153	R 5 428 758	R 2 329 492	R	R 22 552 403	134,2	2,49%	6
	Knopjieslaagte	R 783 560	R 814 259	R 344 605	R	R 1 942 423	11,6	1,25%	6
	Kungwini Local Municipality	R 346 125 156	R 180 820 847	R 83 451 610	R	R 610 397 613	3 635,3	8,11%	6
	Mabopane	R 434 049 946	R 261 752 592	R 126 555 056	R	R 822 357 594	4 901,2	6,01%	6
	Mamelodi	R 370 470 330	R 316 702 975	R 74 508 086	R	R 761 681 392	4 496,4	3,14%	6
	Nellmapius	R 77 172 520	R 30 815 880	R 9 306 187	R	R 117 294 588	698,0	2,89%	6
	Nokeng tsa Taemane Local Municipality	R 69 653 570	R 60 831 795	R 6 807 831	R	R 137 293 196	815,4	3,74%	6
	Olievenhoutbosch	R 16 301 393	R 22 405 260	R 11 855 087	R	R 50 561 740	300,9	4,89%	6
	Pretoria	R 2 393 989 251	R 1 120 328 199	R 371 844 846	R	R 3 886 162 296	23 070,8	5,77%	6
	Rayton	R 13 563 882	R 50 470 684	R 7 317 113	R	R 71 351 679	422,5	1,47%	6
	Saulsville	R 33 881 416	R 75 755 248	R 17 913 302	R	R 127 549 966	754,944	1,41%	6
	Soshanguve	R 508 120 944	R 690 194 546	R 54 966 799	R	R 1 253 282 289	7 303,5	5,07%	6
	Temba	R 234 598 496	R 262 257 849	R 9 879 140	R	R 506 735 485	3 003,4	10,71%	6
	Tirisano	R 20 958 291	R 98 823 496	R 10 918 545	R	R 130 700 332	774,1	3,24%	6
	City total (t)	R 6 743 219 687	R 4 088 164 431	R 1 224 928 499	R	R 12 056 312 617	71 519,8	5,33%	6

Figure D-9: Possible additional jobs and employment per main place



Changes in New Jobs (Number), New Jobs (Growth), New Employees (Number) and New Employees (Growth) are presented in absolute values and are therefore not comparable between main places. Jobs/Employees per R1m capital spending is normalised in terms of capital investment in order to establish comparability between the possible impact on job creation and employment per main place.

The comparable results are presented graphically in Figure D-10.

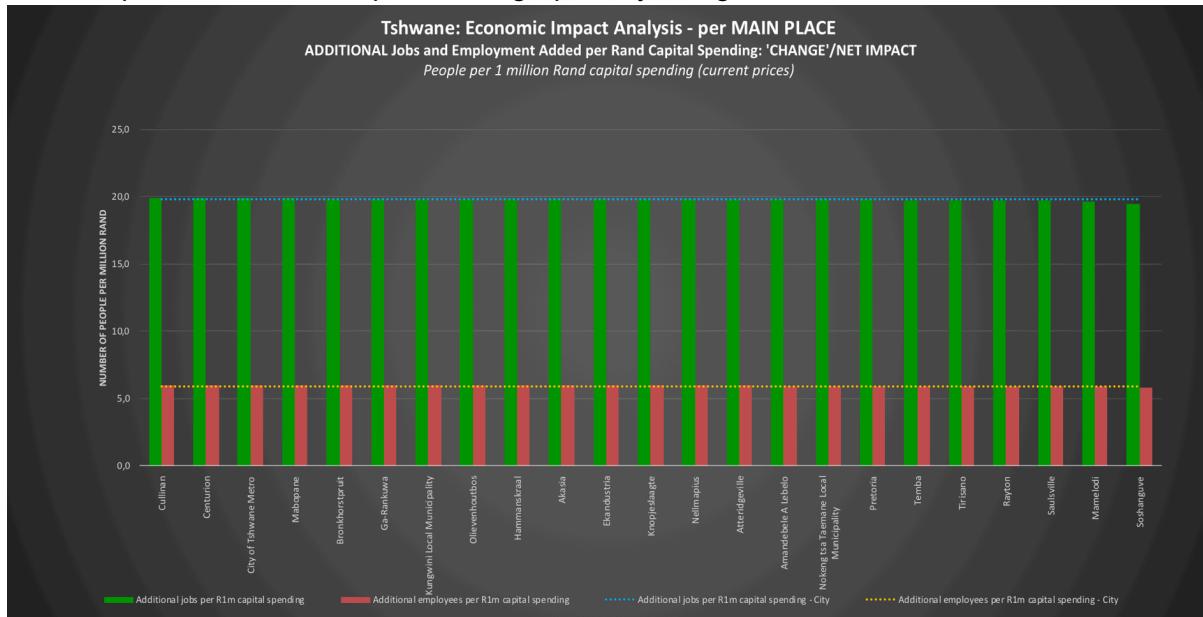


Figure D-10: Job creation and employment per R1m capital spending per main place

D.1.1.4 Possible impact on Income per Capita

The projected economic impact on Income per Capita upon implementation of the total portfolio of capital investment projects as contained in the 2018/2019 MTREF Annexure A capital budget, is presented in Table D-8 and Figure D-11.

Table D-8: Projected economic impact on Income per Capita and Household Income across the City of Tshwane

Proposed Budget		Indicator	Income per capita			Household income		
		Sub-Indicator	Income p.c. (Value)	Income p.c. (growth)	Individual Income per R1bn capital spending	Income per household (Value)	Income per household (growth)	Household Income per R1bn capital spending
			Income equality and socio-economic measure			Income equality and socio-economic measure		
			Additional income per individual	Growth in income per individual	Additional income generated per individual for every billion Rand capital spending	Additional income per household	Growth in income per household	Additional income generated per household for every billion Rand capital spending
Project/ Programme	Capital Programmes	Capital Investment	Rands, current prices	Percentage	Rand per R1bn capital spending	Rands, current prices	Percentage	Rand per R1bn capital spending
P001	MTREF BUDGET 2018/19 Annexu	12 056 312 617	↑R 2,7386	↑0,003492%	↑R 7,5	↑R 9,637	↑0,003492%	↑R 26,5

An analysis of the projected economic impact presents a potential generation of an additional R2,74 income per individual upon full implementation of the total capital project portfolio. This additional income per capita represents the total net impact of the investment i.e. taking into account both new earnings and losses as a result of the capital project portfolio. The change in income implies that additional income of R9,64 could potentially be generated per household, assuming an average household of 3,5 people. The change in income indicates an improvement in income equality and therefore a positive development in socio-economic conditions. The projected additional income represents a 0,00349% increase in income per capita and household income upon full implementation of the capital project portfolio. The project portfolio may therefore create an additional R7,54 income per capita and R26,54 income per household for every R1bn capital investment in the economy.

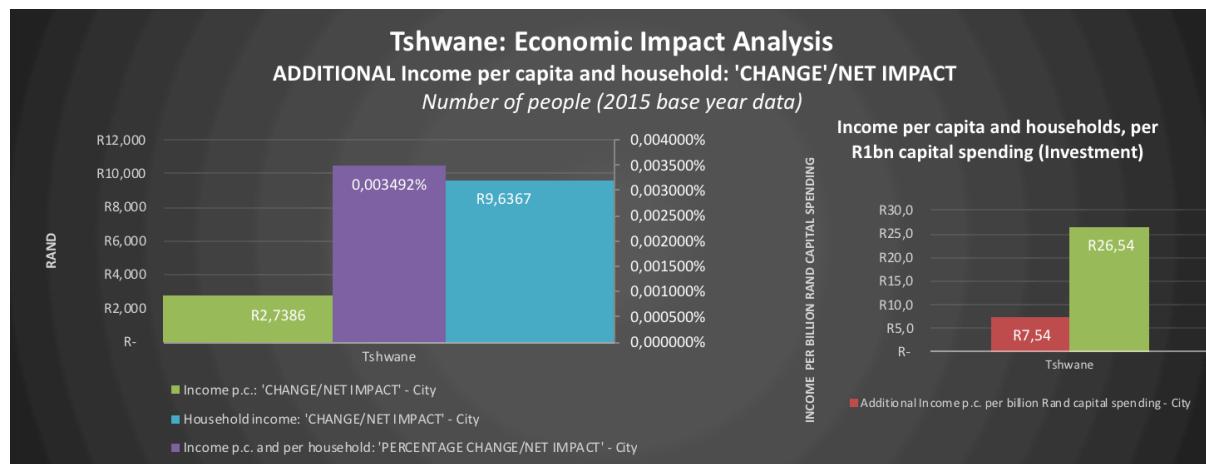


Figure D-11: Possible additional income per capita and households across the City of Tshwane

The projected economic impact per main place upon implementation of the total portfolio of capital investment projects as contained in the 2018/2019 MTREF Annexure A capital budget is presented in Table D-9 and Figure D-12.

Table D-9: Projected economic impact on income per capita and households per main place

Tshwane								Indicator		Income per capita		Household income		
		Sub-Indicator			Income p.c. (Value)		Income p.c. (growth)		Individual Income per R1bn capital spending	Income per household (Value)	Income per household (growth)	Household income per R1bn capital spending		
								Income equality and socio-economic measure			Income equality and socio-economic measure			
Project ID	Project impact area	Grants and subsidies	Bonds & Loans	Internal funding	PPP	Capital Investment	Rands, current prices	Percentage	Rand per R1bn capital spending	Rands, current prices	Percentage	Rand per R1bn capital spending		
P001	Akasia	R 290 236 808	R 76 488 346	R 18 424 114	R -	R 385 149 268	R 0,18694	0,000103%	R 0,5	R 0,658	0,000103%	R 1,7		
	Amandebele A Lebolo	R 184 841 670	R 106 293 057	R 7 341 051	R -	R 299 065 048	R 1,33151	0,005333%	R 10,5	R 11,026	0,005333%	R 36,9		
	Atteridgeville	R 37 191 041	R 19 091 592	R 6 436 057	R -	R 62 719 208	R 0,53092	0,000628%	R 8,5	R 1,868	0,000628%	R 29,8		
	Bronkhorstspruit	R 176 746 416	R 210 657 969	R 104 401 994	R -	R 491 806 380	R 3,15444	0,003006%	R 6,4	R 11,100	0,003006%	R 22,6		
	Centurion	R 507 969 704	R 252 216 295	R 141 179 123	R -	R 901 365 119	R 2,97469	0,002018%	R 3,3	R 10,468	0,002018%	R 11,6		
	City of Tshwane Metro	R 748 494 353	R 184 807 623	R 127 030 384	R -	R 1 060 332 357	R 7,84204	0,007572%	R 7,4	R 27,599	0,007572%	R 26,0		
	Cullinan	R 11 674 380	R 18 349 664	R 19 384 472	R -	R 49 408 516	R 0,52893	0,00855%	R 10,7	R 1,861	0,00855%	R 37,7		
	Ekandustria	R 23 100	R 20 261	R 12 253	R -	R 55 612	R 0,00056	0,00001%	R 10,1	R 0,00001	0,000001%	R 35,4		
	Ga-Rankuwa	R 251 579 306	R 42 247 972	R 12 720 835	R -	R 306 548 114	R 2,52450	0,002718%	R 8,2	R 8,883	0,002718%	R 29,0		
	Hammanskraal	R 14 794 153	R 54 828 739	R 2 329 492	R -	R 22 552 190	R 0,16168	0,000158%	R 7,2	R 0,569	0,000158%	R 25,2		
	Kopjeslaagte	R 783 560	R 184 259	R 344 605	R -	R 1 942 423	R 0,01279	0,00012%	R 6,6	R 0,045	0,00012%	R 23,2		
	Kungwini Local Municipality	R 346 125 156	R 180 820 847	R 83 451 610	R -	R 610 397 613	R 6,72799	0,012011%	R 11,0	R 23,675	0,012011%	R 38,8		
	Mabopane	R 43 049 946	R 261 752 594	R 126 555 056	R -	R 287 357 599	R 8,16871	0,011972%	R 9,9	R 28,745	0,011972%	R 35,0		
	Mamelodi	R 370 470 330	R 76 705 474	R 54 086	R -	R 761 681 393	R 5,69582	0,006269%	R 7,5	R 20,043	0,006269%	R 26,3		
	Nelmapius	R 77 172 520	R 30 815 880	R 9 306 187	R -	R 117 294 588	R 0,45753	0,003030%	R 3,9	R 1,610	0,003030%	R 13,7		
	Nokeng tsa Taemane Local Municipality	R 69 653 570	R 60 831 795	R 6 807 831	R -	R 137 293 196	R 1,45391	0,026099%	R 10,6	R 5,116	0,026099%	R 37,3		
	Olievenhoutbosch	R 16 301 393	R 22 405 260	R 11 855 087	R -	R 50 561 740	R 1,03893	0,00905%	R 2,7	R 0,489	0,00905%	R 9,7		
	Pretoria	R 2 393 989 251	R 1 120 328 199	R 371 844 846	R -	R 3 886 162 296	R 3,91343	0,02293%	R 1,0	R 13,771	0,02293%	R 3,5		
	Rayton	R 13 563 882	R 50 470 684	R 7 317 113	R -	R 71 353 679	R 0,56253	0,000725%	R 7,8	R 1,879	0,000725%	R 27,7		
	Saulspoort	R 33 881 416	R 75 755 248	R 17 913 302	R -	R 127 549 966	R 0,87619	0,00061%	R 6,5	R 3,083	0,00061%	R 24,2		
	Soshanguve	R 508 120 944	R 690 194 546	R 54 966 799	R -	R 1 253 282 289	R 8,79131	0,009854%	R 7,0	R 30,936	0,009854%	R 24,7		
	Tembisa	R 234 598 496	R 262 257 848	R 9 879 140	R -	R 506 735 485	R 3,74034	0,004339%	R 7,4	R 13,162	0,004339%	R 26,0		
	Tirisano	R 20 958 291	R 98 823 496	R 10 918 545	R -	R 130 700 332	R 1,40880	0,002595%	R 10,8	R 4,957	0,002595%	R 37,5		
City Total		R 6 743 219 687	R 4 088 164 431	R 124 928 499	R -	R 1 026 516 312	R 2,73887	0,03492%	R 7,54	R 9,637	0,03492%	R 26,5		

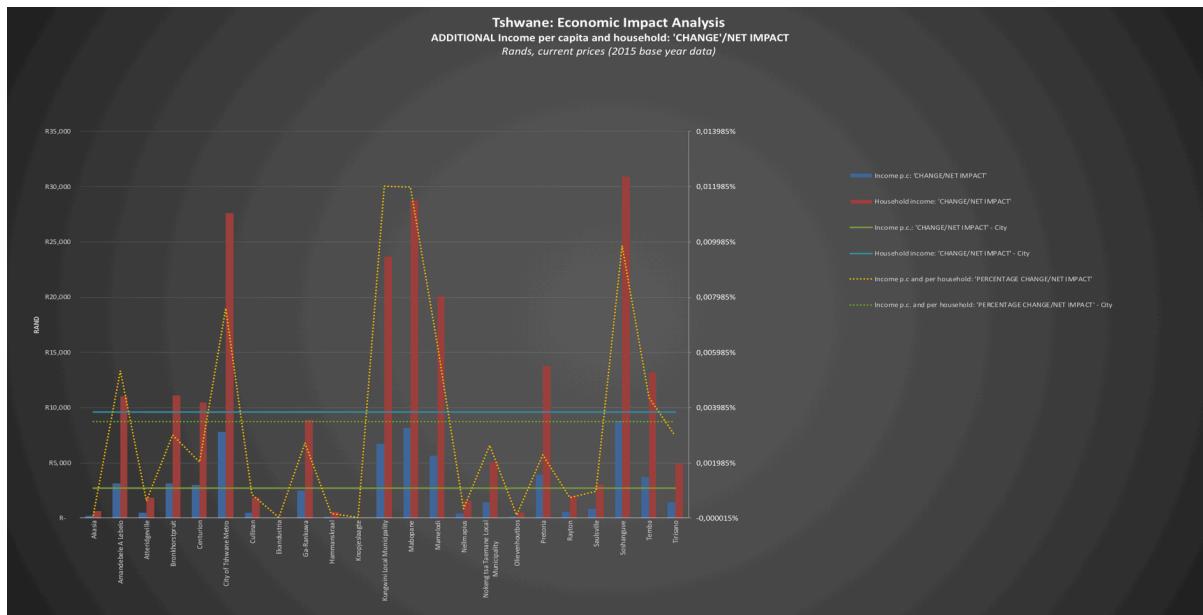


Figure D-12: Possible additional income per capita and household per main place

Changes in Income per Capita (Value), Income per Capita (Growth), Income per Household (Value) and Income per Household (Growth) are presented in absolute values and are therefore not comparable between main places. Individual income/Household income per R1bn capital spending is normalised in terms of capital investment in order to establish comparability between the possible impact on income per capita and household per main place.

The comparable results are presented graphically in Figure D-13.

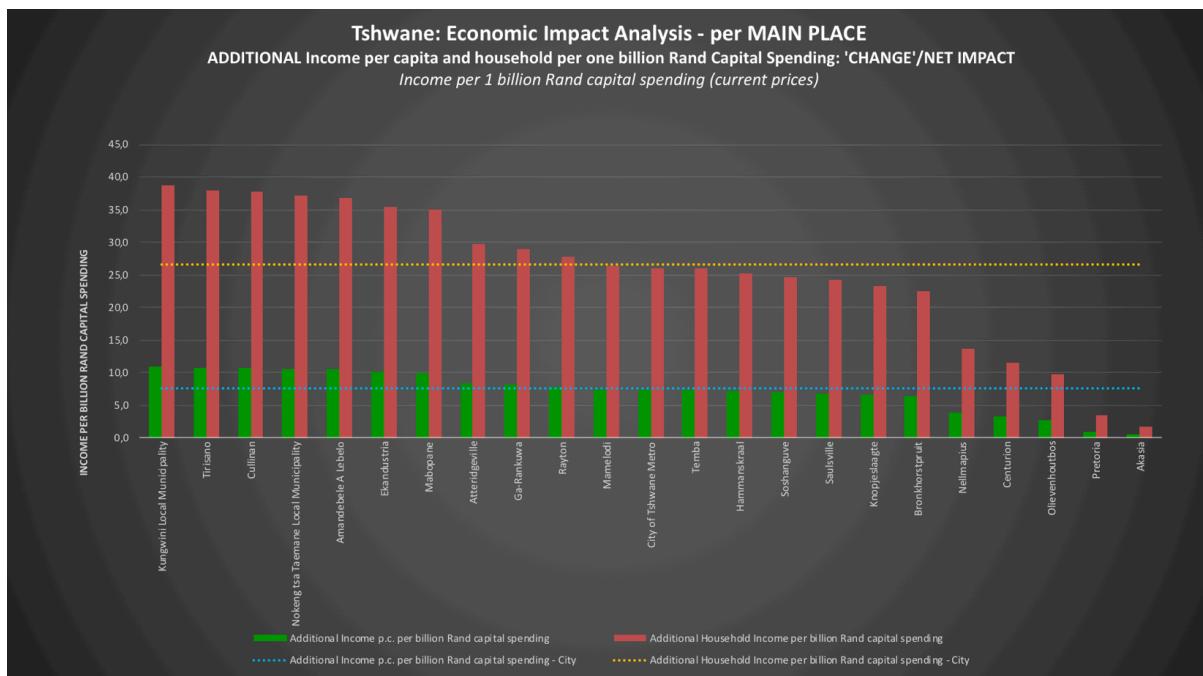


Figure D-13: Income per capita and household per R1bn capital spending per main place

D.1.1.5 Possible impact on the Income to Expenditure ratio

The projected economic impact on the Income to Expenditure ratio upon implementation of the total portfolio of capital investment projects as contained in the 2018/2019 MTREF Annexure A capital budget, is presented in Table D-10 and Figure D-14.

Table D-10: Projected economic impact on the Income to Expenditure ratio across the City of Tshwane

Project/ Programme	Capital Programmes	Capital Investment	<i>Rands, current prices</i>	Income-expenditure ratio	
				Sub-Indicator	Income to expenditure ratio (Value)
				<i>Household's propensity to save; Wealth measure</i>	
P001	MTREF BUDGET 2018/19 Annexu	12 056 312 617	 R 0,000091	 0,86119%	 R 0,286325

An analysis of the projected economic impact indicates that households may potentially be able to save an additional R0,000091 of every R1m increase in income available after spending upon full implementation of the total capital project portfolio. This additional income represents the total net impact of the investment i.e. taking into account both new earnings and losses as a result of the capital project portfolio. The additional income implies a possible 0,86% increase in income available for saving could potentially be generated per household upon full implementation of the capital project portfolio. The project portfolio may therefore create an additional R0,29 income available for saving/wealth creation for every R1bn economic growth i.e. income growth for the whole economy.

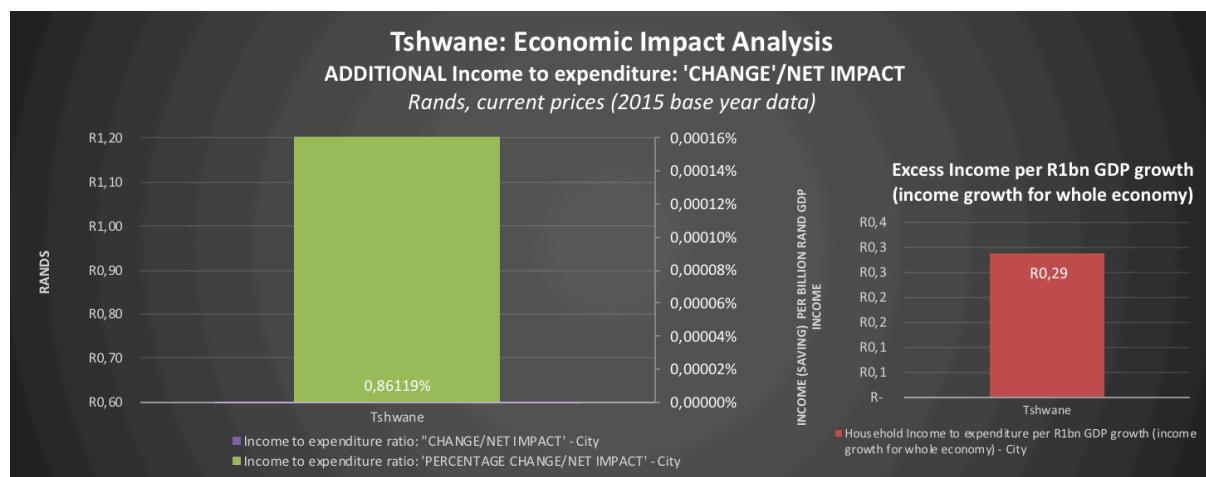


Figure D-14: Possible additional income to expenditure across the City of Tshwane

The projected economic impact per main place upon implementation of the total portfolio of capital investment projects as contained in the 2018/2019 MTREF Annexure A capital budget is presented in .

Table D-11 and Figure D-15.

Table D-11: Projected economic impact on income to expenditure per main place

Project ID	Tshwane					Indicator	Gross domestic product (GDP)		Income-expenditure ratio		Household excess Income per R1bn GDP growth (income growth for whole economy)
							GDP value	Income to expenditure ratio (Value)	Income to expenditure ratio (growth)		
		Sub-Indicator					Income for the whole economy	Household's propensity to save; Wealth measure			
Project ID	Project Impact area	Grants and subsidies	Bonds & Loans	Internal funding	PPP	Capital Investment	Rands, current prices	Rands, current prices	Percentage	Rand per R1bn GDP increase	
P001	Akasia	R 290 236 808	R 76 488 346	R 18 424 114	R	R 385 149 268	R 931 070 146	R	0.000072	0.66364%	R 0.066441
	Amandebele A Lebolo	R 184 841 670	R 106 882 321	R 7 341 057	R	R 299 065 048	R 728 613 770	R	0.000056	0.48152%	R 0.0409424
	Atteridgeville	R 37 191 043	R 19 091 592	R 6 436 575	R	R 62 719 208	R 152 807 283	R	0.000011	0.10053%	R 0.0016967
	Bronkhorstspruit	R 176 746 416	R 210 657 959	R 104 401 994	R	R 491 806 380	R 1 158 540 012	R	0.000075	0.83434%	R 0.0870054
	Centurion	R 507 969 704	R 252 216 295	R 141 179 121	R	R 901 365 119	R 1 978 556 668	R	0.000155	1.39222%	R 0.3065063
	City of Tshwane Metro	R 748 494 353	R 184 807 623	R 127 030 381	R	R 1 060 332 357	R 2 577 414 907	R	0.000191	1.72360%	R 0.4912652
	Cullinan	R 11 674 380	R 18 349 664	R 19 384 472	R	R 49 408 516	R 120 823 834	R	0.000007	0.07598%	R 0.0008165
	Ekandustria	R 23 109	R 20 261	R 12 251	R	R 55 612	R 136 913	R	0.000000	0.00011%	R 0.0000000
	Ga-Rankuwa	R 251 579 306	R 42 247 972	R 12 720 835	R	R 305 548 114	R 742 763 697	R	0.000058	0.53480%	R 0.0430395
	Hammanskraal	R 14 794 153	R 5 428 758	R 2 329 492	R	R 22 552 403	R 55 396 069	R	0.000004	0.03838%	R 0.0002193
	Knoppieslaagte	R 783 560	R 814 259	R 344 605	R	R 1 942 423	R 4 781 062	R	0.000000	0.00256%	R 0.0000016
	Kungwini Local Municipality	R 346 125 156	R 180 820 847	R 83 451 610	R	R 610 397 613	R 1 468 842 665	R	0.000101	1.06634%	R 0.1490792
	Mabopane	R 430 049 946	R 261 752 592	R 126 555 056	R	R 822 357 594	R 1 954 709 776	R	0.000140	1.26149%	R 0.2746130
	Mamelodi	R 370 470 330	R 316 702 975	R 74 508 086	R	R 761 681 392	R 1 742 210 771	R	0.000132	1.19097%	R 0.2308355
	Nelmaanrus	R 77 172 520	R 30 815 880	R 9 306 187	R	R 117 294 588	R 285 942 589	R	0.000021	0.18862%	R 0.0061419
	Nokeng ts-a-Tsaemane Local Municipality	R 69 653 570	R 60 831 795	R 6 807 831	R	R 137 293 196	R 332 793 553	R	0.000024	0.23397%	R 0.0079580
	Olievenhoutbosch	R 16 301 393	R 22 405 260	R 11 855 087	R	R 5056 1740	R 123 616 347	R	0.000008	0.06702%	R 0.0009559
	Pretoria	R 2 393 989 251	R 1 120 328 199	R 371 844 846	R	R 3 886 162 296	R 6 055 266 633	R	0.000684	6.46873%	R 4.1435195
	Rayton	R 13 563 882	R 50 470 684	R 7 317 113	R	R 73 156 179	R 171 978 758	R	0.000011	0.12414%	R 0.0018987
	Saulspoort	R 33 881 416	R 75 755 248	R 17 913 302	R	R 127 549 966	R 303 663 642	R	0.000021	0.18861%	R 0.0062627
	Soshanguve	R 508 120 944	R 69 194 546	R 54 966 799	R	R 1 253 282 889	R 2 772 203 316	R	0.000219	1.98790%	R 0.6083471
	Tembisa	R 234 598 496	R 262 257 849	R 9 879 140	R	R 506 735 485	R 1 223 279 908	R	0.000091	0.82460%	R 0.1109464
	Tiriso	R 20 958 291	R 98 823 496	R 10 918 545	R	R 130 700 332	R 316 919 598	R	0.000021	0.19371%	R 0.0067419
	City total (t)	R 6 743 219 687	R 4 088 164 431	R 1 224 928 499	R	R 12 056 312 617	R 25 202 333 915	R	0.000091	0.86119%	R 0.2863251

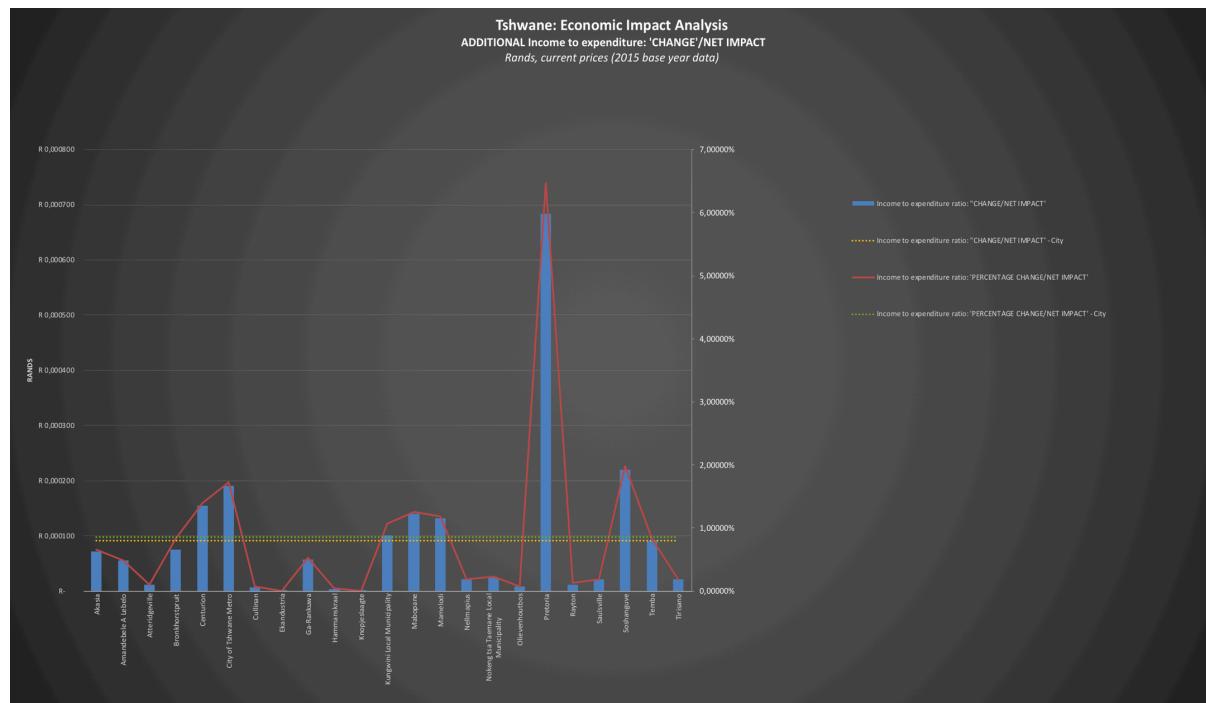


Figure D-15: Possible additional income to expenditure per main place

Changes in Income to Expenditure ratio (Value) and Income to Expenditure ratio (Growth) are presented in absolute values and are therefore not comparable between main places. Household excess income per R1bn GDP growth is normalised in terms of growth in GDP in order to establish comparability between the possible impact on income to expenditure per main place.

The comparable results are presented graphically in Figure D-16.

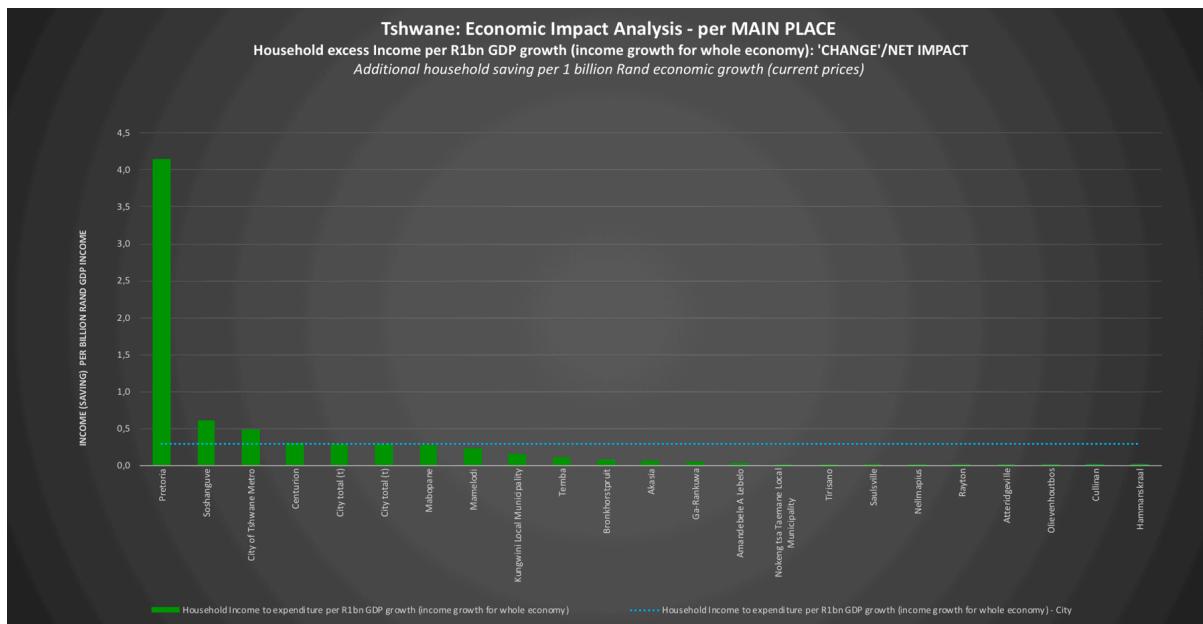


Figure D-16:Household excess income per R1bn GDP growth per main place

D.1.1.6 Possible impact on the Fiscal Deficit as a percentage of GDP

The projected economic impact on the Fiscal Deficit as a percentage of GDP upon implementation of the total portfolio of capital investment projects as contained in the 2018/2019 MTREF Annexure A capital budget, is presented in Table D-12 and Figure D-17.

Table D-12: Projected impact on the fiscal deficit as a % of GDP across the City of Tshwane

		<i>Indicator</i>	Fiscal deficit as % of GDP				
			<i>Sub-Indicator</i>	Fiscal deficit as % of GDP: 'before' (base) position	Fiscal deficit as % of GDP: 'after' (new) position	Fiscal deficit as % of GDP: change	
Proposed Budget							
Project/ Programme	Capital Programmes	Capital Investment	Percentage	Percentage	Percentage points	Rand per R1m GDP increase	
P001	MTREF BUDGET 2018/19 Annexure A		-3,23%	-3,05%	0,1775%	R 1 775	
<i>Evaluation</i>			Deficit	Deficit decrease	Deficit decrease	Narrowing of the deficit for every R1mn change in GDP income	

An analysis of the projected economic impact indicates that the fiscal deficit of -3.23% may potentially decrease to -3.05% upon full implementation of the total capital project portfolio. This change in fiscal position represents the total net impact of the investment i.e. taking into account both new earnings and losses as a result of the capital project portfolio. The deficit decrease implies that the project portfolio is affordable given that the capital investment may generate excess income to not only fund the cost of the investment over time, but to decrease the fiscal deficit. Implementation of the project portfolio could potentially result in a R1 775 narrowing of the deficit for every R1mn change in GDP income.

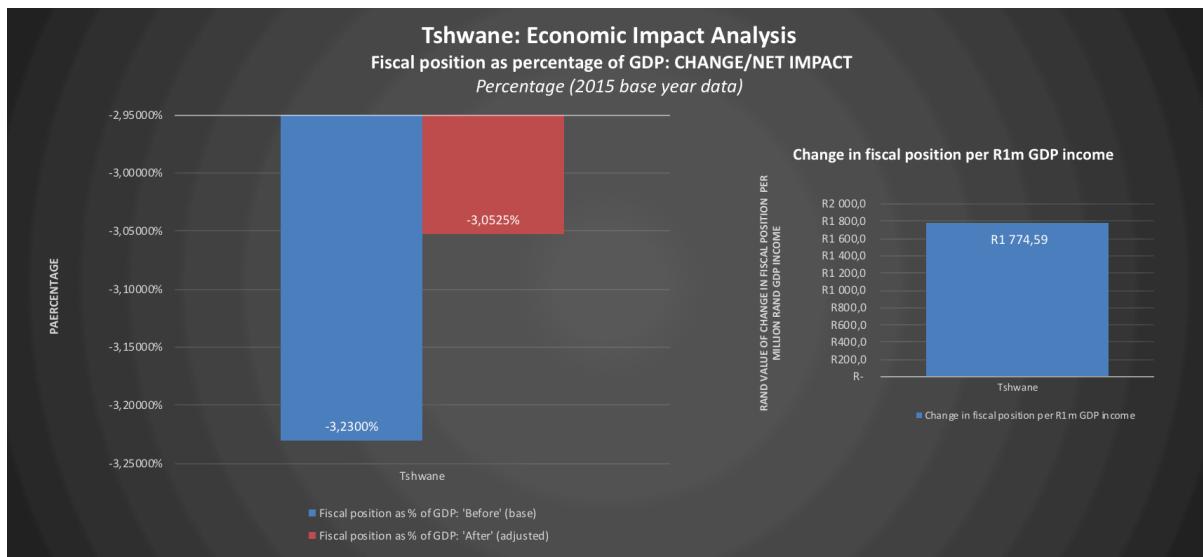


Figure D-17: Possible fiscal position as a % of GDP across the City of Tshwane

This indicator is not presented at main place level due to the inherent nature of the indicator. Further detail on the projected economic impact upon implementation of the total portfolio of capital investment projects as contained in the 2018/2019 MTREF Annexure A capital budget is presented in Table D-13.

Table D-13: Projected economic impact of fiscal deficit as a % of GDP – detail

Tshwane		Funding					Indicator	Gross domestic product (GDP)	Fiscal deficit as % of GDP			
Project ID	Project impact area	Grants and subsidies	Bonds & Loans	Internal funding	PPP	Capital Investment	Rands, current prices		Fiscal deficit as % of GDP: 'before' (base) position	Fiscal deficit as % of GDP: 'after' (new) position	Fiscal deficit as % of GDP: change	Change in fiscal position for every R1mn change in GDP
P001	City	R 6 743 219 687	R 4 088 164 431	R 1 224 928 499	R	- R 12 056 312 617	R 25 202 331 915	Percentage	Percentage	Percentage points	Rand per R1m GDP increase	
	Evaluation							-3,2300%	-3,0525%	0,175%	R 1 774,59	

D.1.2 Analysis of the integrated operational and capital budgets

D.1.2.1 Background information and policy assumptions included in the simulation

A budget impact simulation was performed utilising the input information set out in Table D-14.

Table D-14: Budget Impact Simulation Input

Input source	Application	Hosted by:
Audited annual financial statements (AFS) (2008-2016). Unaudited annual financial statements (AFS) (2017).	Historic information and trends for each line item. Other financial information, as required. Supporting information to listing of borrowing.	National Treasury website Municipality website
Listing of borrowing per municipality, dated 31 July 2017.	Construction of amortisation tables for all existing borrowing.	National Treasury website

Input source	Application	Hosted by:
MBRR Schedule A1, including detail of schedules A2-A10 (combined tables) dated 25 May 2017.	Inclusion of already budgeted amounts for year 1 – 3 of the forecast horizon. Other financial information as required. Supporting information to listing of borrowing. Supporting information to audited annual financial statements.	National Treasury website
2017/2018 Annexure B capital budget as at 19 January 2018	Inclusion of detailed project information.	CaPS (not publicly available)
2018/2019 MTREF Annexure A capital budget.	Inclusion of detailed project information.	CaPS (not publicly available)

The following policy-related assumptions were included as part of the simulation:

- Working capital management will remain in line with pronouncements in the unaudited 2016/2017 Annual Financial Statements;
- In terms of operational cash flow ratios, Repairs and Maintenance is measured as a percentage of total operating expenditure;
- Minimum liquidity required is calculated based on the assumption that at a minimum the following items need to be cash-backed at year end:
 - Cash reserved for operating expenses (minimum of one month);
 - Any unspent conditional grants;
 - VAT payments due;
 - Investments secured against long term liabilities;
 - Other provisions - as indicated by the municipality;
 - Reserves - as indicated by the municipality;
 - Interest and capital repayments on long term borrowing for the next 12 months;
 - Consumer deposits;
 - Capital Replacement Reserve (CRR) balance prior to any transfer of surplus liquidity to the CRR at yearend;
- In calculating total cash and near cash at yearend, consumer debtors (current to 60 days) and any unused bank overdraft facility is added to forecast cash and investments;
- Should there be any surplus liquidity after deducting minimum liquidity required from available liquidity sources, such funds are assumed to be added to the CRR available for capital expenditure in the following year;
- Cash reserved for operating expenses is based on one month's forecast cash operating expenditure;
- 100% of the CRR at year end may be utilised for capital expenditure in the following year.

The forecast horizon spans a period of five years, year one being the current 2017/2018 financial year.

A further important assumption to take note of relates to forecasting techniques being applied to the capital budget amounts for year 4 and 5 of the forecast. The capital budget amounts in the 4th and 5th years are increased programmatically to accommodate for changes over years 1 to 3 as well as changes in prices and other economic circumstances over the forecast period, thereby including a conservative forecast over the medium term.

D.1.2.2 Detailed analysis of the integrated operational and capital budget

As the status quo position represents the forecast financial position of the City of Tshwane taking into account current operations, the 2018/2019 MTREF Annexure A capital budget, as well as all external borrowing already committed at the start of the current year, it is utilised in the analysis for determining a possible financial strategy.

D.1.2.2.1 The Operational Budget and Capital Budget funding envelopes

Taking into account the inputs and assumptions listed, Table D-15 and Figure D-18 indicates that the Operational budget is forecast to be fully funded across the forecast horizon with the possibility of an increasing funding surplus in the outer years.

Table D-15: Operational budget funding position

Operational budget funding position	Previous year (audited)	Previous year (unaudited)	Current year	MTREF			Longer Term Financial Plan
				2018	2019	2020	
Determinants							
Cash operating expenditure	22 349 381 936	23 954 197 894	25 440 197 065	27 129 390 183	28 972 307 455	30 524 344 745	32 214 818 141
Working capital adjustments	526 880 136	1 429 046 720	1 334 114 184	489 718 963	512 262 034	-588 917 402	225 199 293
Loss on disposal of PPE	-	64 865 196	-1 062	-1 125	-1 200	-1 272	-1 348
Interest paid on external debt	1 061 586 522	1 205 642 506	1 331 590 145	1 232 807 582	1 175 139 267	1 125 634 144	1 084 349 155
Debt repayment - capital	687 294 188	732 530 217	734 692 170	788 400 914	906 999 192	1 016 608 913	1 110 678 423
Operational project expenditure	-	-	-	-	-	-	-
Total operational expenditure	24 625 142 782	27 386 282 533	28 840 592 502	29 640 316 517	31 566 706 749	32 077 669 128	34 635 043 663
Funded by:							
Total operating income (excl conditional operating and capital grants, excl investment income)	23 634 681 923	26 159 063 136	28 119 777 023	29 868 162 668	31 802 244 721	33 929 755 574	36 184 892 417
Investment income	55 999 525	105 227 293	79 492 589	74 608 912	79 433 982	82 611 341	82 611 341
Conditional operational grants received (excl Equitable Share allocation)	1 862 436 859	1 948 305 797	2 026 743 871	2 021 229 490	2 086 203 290	2 167 409 083	2 297 453 628
Bank overdraft utilised	-	-	-	-	-	-	-
Total operational funding	25 553 118 307	28 212 596 226	30 226 013 483	31 964 001 070	33 967 881 993	36 179 775 999	38 564 957 387
Funding surplus/(deficit)	927 975 525	826 313 693	1 385 420 980	2 323 684 553	2 401 175 244	4 102 106 871	3 929 913 724
Funding as a percentage of operational expenditure							
Total operating income %	96%	96%	98%	101%	101%	106%	104%
Investment income %	0%	0%	0%	0%	0%	0%	0%
Conditional operational grants %	8%	7%	7%	7%	7%	7%	7%
Bank overdraft %	0%	0%	0%	0%	0%	0%	0%
% funding surplus	4%	3%	5%	8%	8%	13%	11%
% alternative funding required for shortfall	0%	0%	0%	0%	0%	0%	0%

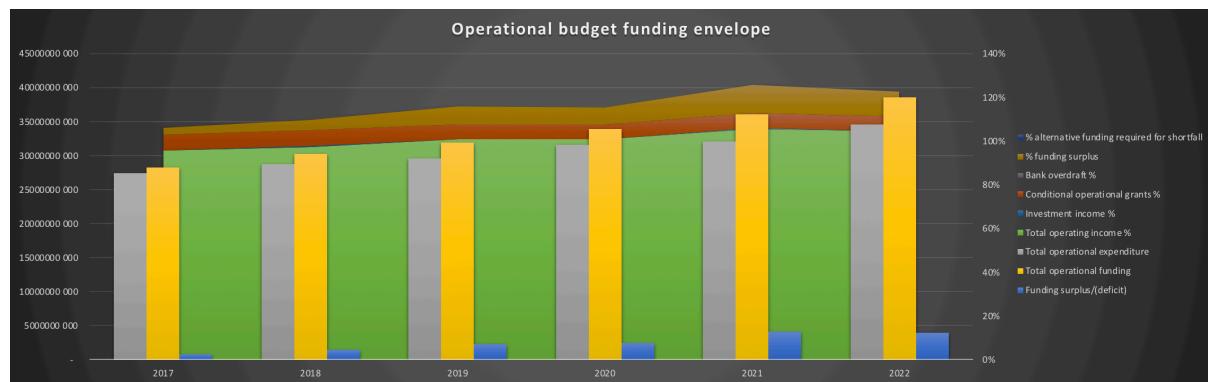


Figure D-18: Operational budget funding envelope

However, Table D-16 and Figure D-19 indicate that the forecast operational budget funding surplus is not yet translating into contributions to internal funding of the Capital budget through the Capital Replacement Reserve (CRR) across the forecast horizon. The first contribution to the Capital Replacement Reserve from liquidity surplus takes place in the last forecast year, which should then contribute to the funding envelope from the following year. The funding shortfall receives attention in the resourcing plan presented in section D.2.

Table D-16: Capital budget funding position

Capital budget funding position	Previous year (audited)	Previous year (unaudited)	Current year	MTREF			Longer Term Financial Plan
Determinants	2016	2017	2018	2019	2020	2021	2022
Capital expenditure (approved)	3 968 594 186	3 232 827 753	3 741 391 688	4 023 015 060	3 990 285 387	5 024 599 086	5 597 462 040
Funded by:							
Conditional capital grants received	2 452 210 170	2 355 387 259	2 449 910 336	2 168 935 510	2 301 280 710	2 554 501 580	2 707 771 675
New debt	1 200 000 000	1 000 000 000	-	-	-	-	-
Capital replacement reserve - Capital expenditure	-	-	-	-	-	-	-
Total funding	3 652 210 170	3 355 387 259	2 449 910 336	2 168 935 510	2 301 280 710	2 554 501 580	2 707 771 675
Funding surplus/(deficit)	-316 384 016	122 559 506	-1 291 481 352	-1 854 079 550	-1 689 004 677	-2 470 097 506	-2 889 690 365
Funding as a percentage of capital expenditure							
Conditional capital grants %	62%	73%	65%	54%	58%	51%	48%
External borrowing %	30%	31%	0%	0%	0%	0%	0%
CRR %	0%	0%	0%	0%	0%	0%	0%
% funding surplus	0%	4%	0%	0%	0%	0%	0%
% alternative funding required for shortfall	8%	0%	35%	46%	42%	49%	52%

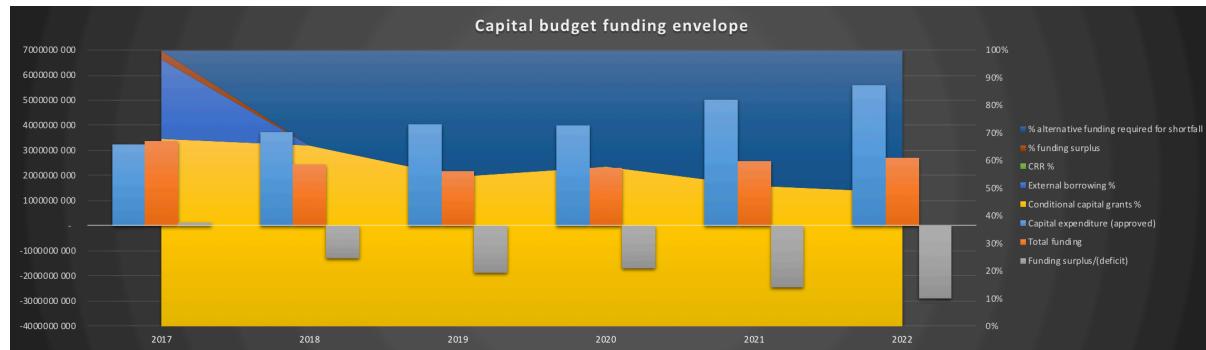


Figure D-19: Capital budget funding envelope

D.1.2.2.2 Forecast cash position

Table D-17: Forecast total cash and investments position

Line Items	Previous year (audited)	Previous year (unaudited)	Current year	MTREF			Longer Term Financial Plan
	2016	2017	2018	2019	2020	2021	2022
Call Investment Deposits	493 261 328	1 087 430 061	-	-	-	-	-
Cash	57 158 390	74 581 166	-	-	-	-	-
Cash and investments (excl overdraft) - opening balance	550 419 718	1 162 011 227	2 110 884 426	2 204 824 054	2 674 429 057	3 386 599 624	5 018 608 989
Net cash surplus/(deficit)	611 591 509	948 873 199	93 939 628	469 605 003	712 170 567	1 632 009 365	1 040 223 358
Call Investment Deposits	1 087 430 061	1 712 108 929	-	-	-	-	-
Cash	74 581 166	398 775 497	-	-	-	-	-
Cash and investments (excl overdraft) - closing balance	1 162 011 227	2 110 884 426	2 204 824 054	2 674 429 057	3 386 599 624	5 018 608 989	6 058 832 347

As can be seen from Table D-17, the forecast total cash and investments increases over the forecast horizon. However, the forecast net cash surplus/(deficit) is inconsistent and warrants further scrutiny.

In this regard, there are two specific sub-sections to the net cash surplus/(deficit) which require attention.

Table D-18 sets out the detail of the working capital adjustments included in the determination of the forecast net cash surplus/(deficit). Consideration should be given to the fact that the 2017/2018 budget was prepared prior to the finalisation of the unaudited 2016/2017 Annual Financial Statements. As a result, a degree of the erratic movements from 2017 to 2018 can be attributed to this fact. However, consistency in the forecast changes from 2019 onwards need to be prioritised in formulating the financial strategy by giving consideration to past trends as well as strategic future priorities. The use of the simulation engine can assist in performing this analysis as well as testing of proposed strategies.

Table D-18: Detailed working capital adjustments

Line items	Previous year (audited)	Previous year (unaudited)	Current year	MTREF			Longer Term Financial Plan
	2016	2017	2018	2019	2020	2021	2022
Consumer Debtors -change	-4 297 946 637	-1 125 707 280	461 071 492	-456 462 661	-478 878 255	-753 689 999	-583 739 606
Other Debtors -change	130 086 011	-61 483 514	94 946 101	-52 360 265	-50 580 016	-358 921 807	-97 289 934
Current Portion Of Long-Term Receivables -change	6 916 134	4 244 262	-72 343 908	-13 303 866	-13 996 134	37 712 122	-9 728 993
Change in Current Assets (Excluding Inventory & Cash)	-4 160 944 492	-1 182 946 532	483 673 685	-522 126 792	-543 454 405	-1 074 899 685	-690 758 534
Consumer Deposits -change	24 689 856	31 387 379	-11 581 640	7 915 106	8 073 408	9 161 687	26 547 405
Provisions -change	-	-	-	-	-	-	-
Creditors -change	2 281 462 316	533 128 314	-1 559 485 766	96 465 616	98 549 859	1 543 575 176	485 711 005
Conditional Grants and Receipts -change	-40 074 460	130 632 635	-237 120 972	-2 123 485	1 403 452	-	-
Change in Current Liabilities	2 266 077 712	695 148 328	-1 808 188 378	102 257 236	108 026 719	1 552 736 863	512 258 409
Change in Inventory	-91 443 913	-115 104 753	-9 599 492	-69 849 408	-76 834 349	111 080 223	-46 699 168
Change in non-cash/non-standard items (only historic amounts)	1 459 430 557	-826 143 763	-1	-	-	-	-
Working capital adjustments	-526 880 136	-1 429 046 720	-1 334 114 184	-489 718 963	-512 262 034	588 917 402	-225 199 293

In the second instance, selected individual line items are analysed in terms of the trend in annual growth percentages. Although the overall forecast growth rate in total operating income and expenditure presented in Table D-19 and Table D-20 is relatively aligned to the past trend, the forecast growth rates in certain individual line items are not necessarily. Individual line items which would traditionally exhibit a historic trend need to be forecast similarly. This finding needs to be addressed in the formulation of the financial strategy.

Table D-19: Annual percentage increase for selected income line items

Annual percentage increases per line item	Previous year (audited)	Previous year (unaudited)	Current year	MTREF			Longer Term Financial Plan
	2016	2017	2018	2019	2020	2021	2022
Property Rates	10%	10%	13%	7%	7%	7%	7%
Service Charges - Total	16%	10%	9%	7%	7%	6%	6%
Service Charges - Electricity	9%	21%	4%	6%	6%	6%	6%
Service Charges - Water	37%	-2%	12%	7%	7%	7%	7%
Service Charges - Sanitation	6%	14%	34%	7%	7%	6%	7%
Service Charges - Refuse	16%	-20%	49%	9%	9%	8%	7%
Service Charges - Other	30%	36%	-100%	0%	0%	0%	0%
Rental of facilities and equipment	16%	-2%	18%	10%	10%	5%	5%
Revenue foregone	62%	5%	23%	11%	11%	7%	7%
Total operating income (excluding conditional operating and capital grants)	10%	11%	7%	6%	6%	7%	7%

Table D-20: Annual percentage increase for selected expense line items

Annual percentage increases per line item	Previous year (audited)	Previous year (unaudited)	Current year	MTREF			Longer Term Financial Plan
	2016	2017	2018	2019	2020	2021	2022
Employee expenses - Wages & Salaries	11%	9%	7%	8%	7%	6%	6%
Employee expenses - Social Contributions	21%	4%	19%	7%	7%	6%	6%
Councillor remuneration	8%	5%	6%	6%	6%	5%	5%
Debt impairment	-30%	26%	84%	8%	6%	6%	6%
Bulk Purchases	11%	9%	8%	6%	6%	4%	5%
Bulk Purchases - Electricity	10%	10%	-2%	6%	6%	6%	7%
Bulk Purchases - Water	17%	3%	47%	7%	7%	0%	0%
Contracted services	8%	-9%	-9%	-1%	10%	6%	6%
Total operating expenditure (excluding conditional operating and capital grants)	8%	8%	9%	6%	7%	5%	8%

The graphic representation of the forecast cash flow position in Figure D-20 summarises the overall position and indicates that growth rates may warrant a deeper investigation, as presented in the preceding tables and analysis.

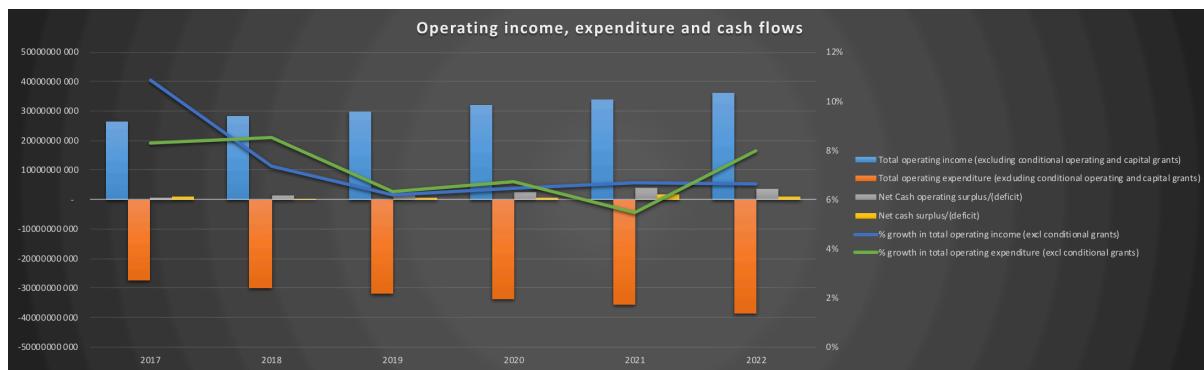


Figure D-20: Summarised operating income expenditure and cash flows

Please refer to Table 1 Addendum A for the detailed calculation of the forecast cash position. In terms of standard operational cash flow ratio measured against MFMA requirements, the forecast falls within the requirements. City of Tshwane ratio requirements are not measured separately as the financial strategy is in the process of being formulated, as indicated previously. Table D-21 contains the detailed ratio calculations and assessment.

Table D-21: Operational cash flow ratio measurement

Operational cash flow - status quo							
Operational cash flow requirements	City of Tshwane	MFMA					
Salaries, wages and allowances (including Councilors)		25%-40% of opex					
Repairs and maintenance		8% of PPE and Investment property (carrying value) Requires addition of a fixed asset register					
Determinants	Previous year (audited)	Previous year (unaudited)	Current year	2018	2019	2020	2021
Total operating expenditure (excluding conditional operating and capital grants)	-25 444 741 571	-27 558 563 336	-29 909 060 837	-31 798 854 868	-33 937 374 127	-35 799 398 778	-38 657 894 947
Employee expenses - Wages & Salaries	-4 555 121 163	-4 950 954 887	-5 284 882 100	-5 713 191 155	-6 098 981 625	-6 464 920 522	-6 852 815 754
Approved capital projects: Employee expenses - Wages & Salaries	-	-	-	-	-	-	-
Employee expenses - Social Contributions	-2 842 687 704	-2 944 872 135	-3 493 889 645	-3 726 116 114	-3 973 220 796	-4 211 614 044	-4 464 310 886
Approved capital projects: Employee expenses - Social Contributions	-	-	-	-	-	-	-
Councillor remuneration	-112 443 327	-118 003 200	-125 280 507	-132 672 056	-140 102 000	-147 107 100	-154 462 455
Total salaries,wages and allowances (including Councilors)	-7 510 252 194	-8 013 830 222	-8 904 052 252	-9 571 979 325	-10 212 304 421	-10 823 641 666	-11 471 589 095
MFMA	30%	29%	30%	30%	30%	30%	30%
Repairs and maintenance	-1 428 498 977	-1 061 466 367	-1 197 928 720	-1 366 099 673	-1 526 761 535	-1 633 634 843	-1 747 989 282
Approved capital projects: Repairs and maintenance	-	-	-	-	-	-	-
Total Repairs and maintenance	-1 428 498 977	-1 061 466 367	-1 197 928 720	-1 366 099 673	-1 526 761 535	-1 633 634 843	-1 747 989 282
City of Tshwane (repairs and maintenance/opex)	6%	4%	4%	4%	4%	5%	5%
MFMA	Requires addition of a fixed asset register to calculate						

Notes: Items highlighted in red do not meet the requirements whereas items marked in green do meet the requirements

D.1.2.2.3 Forecast liquidity position

After taking into account the liquidity policy assumptions as stated earlier, the analysis of the forecast liquidity position in Figure D-21 confirms the shortage of funding from internal sources (CRR) across the forecast horizon as indicated in the analysis of the capital budget funding envelope. The forecast liquidity surplus in 2021 is transferred to the CRR in 2022, which would then be available as an internal funding source in 2023 – outside the forecast horizon.



Figure D-21: Forecast liquidity position

The detailed analysis of the liquidity position presented in Table D-22, indicates a forecast liquidity deficit turning into a surplus in the last two years of the forecast horizon. This enables the contribution to the Capital Replacement Reserve (CRR).

Furthermore, although the Cash/Cost coverage ratio requirements are met across the forecast horizon, the items that drive the Current ratio may require attention.

As stated previously, use of the simulation engine can assist in performing testing of proposed strategies in order to address the liquidity position of the City of Tshwane through the formulation of its financial strategy.

Table D-22: Detailed analysis of the liquidity position

Liquidity position - status quo						
Liquidity requirements	City of Tshwane	MFMA				
Cash/Cost coverage ratio in months			1-3			
MFMA formula: ((Cash and Cash Equivalents - Unspent Conditional Grants - Overdraft) + Short Term Investment) / Monthly Fixed Operational Expenditure excluding (Depreciation, Amortisation, Provision for Bad Debts, Impairment and Loss on Disposal of Assets)						
Current ratio			1.5-2:1			
MFMA formula: (Current assets/Current liabilities)						
Determinants	Previous year (audited)	Previous year (unaudited)	Current year	MTREF		Longer Term Financial Plan
	2016	2017	2018	2019	2020	2021
<i>Cash operating expenditure</i>	-22 349 381 936	-23 954 197 894	-25 440 197 065	-27 129 390 183	-28 972 307 455	-30 524 344 745
<i>Months cash coverage</i>	1	1	1	1	1	1
Operating expenses - cash reserved	1 862 448 495	1 996 183 158	2 120 016 422	2 260 782 515	2 414 358 955	2 543 695 395
Unspent conditional grants	130 291 177	260 923 812	23 802 840	21 679 355	23 082 807	23 082 807
VAT payments due	755 994 586	1 779 050 282	516 436 141	531 929 225	547 887 102	564 323 715
Secured investments against long term liabilities	119 116 528	128 505 761	129 718 732	-	-	-
Other provisions - portion cash backed	179 960 106	166 205 145	176 710 285	185 373 617	194 266 486	203 585 970
Self-insurance reserve - portion cash backed	28 199 547	28 000 000	28 300 000	28 300 000	28 300 000	28 300 000
Housing Development fund - portion cash backed	156 442 652	156 442 652	156 442 652	156 442 652	156 442 652	156 442 652
Interest paid on external debt	1 205 642 506	1 331 590 145	1 232 807 582	1 175 139 267	1 125 634 144	1 084 349 155
Debt repayment - capital	732 530 217	734 692 170	788 400 914	906 999 192	1 016 608 913	1 110 678 423
Consumer deposits	375 949 547	407 336 926	395 755 286	403 670 392	411 743 800	420 905 487
Capital replacement reserve - balance before transfers	-	-	-	-	-	-
Minimum liquidity required	5 546 575 361	6 988 930 051	5 568 390 854	5 670 316 215	5 918 324 858	6 135 363 604
Cash and investments (excl overdraft) - closing balance	1 162 011 227	2 110 884 426	2 204 824 054	2 674 429 057	3 386 599 624	5 018 608 989
Consumer debtors - current to 60 days	2 402 951 601	1 963 563 225	1 452 709 006	1 541 274 608	1 634 189 416	1 780 424 834
Available bank overdraft facility at year end	-	-	-	-	-	-
Total cash and near cash at year end	3 564 962 828	4 074 447 651	3 657 533 060	4 215 703 665	5 020 789 040	6 799 033 823
Liquidity surplus/(deficit) (pre-CRR transfer)	-1 981 612 533	-2 914 482 400	-1 910 857 794	-1 454 612 550	-897 535 818	663 670 219
Cash/Cost coverage ratio in months: MFMA	0,6	0,9	1,0	1,2	1,4	2,0
Current ratio: MFMA	1,0	1,2	1,4	1,5	1,6	1,5

Notes: Items highlighted in red do not meet the requirements whereas items marked in green do meet the requirements

Movement in Capital Replacement Reserve

Movement in Capital Replacement Reserve	Previous year (audited)	Previous year (unaudited)	Current year	MTREF		Longer Term Financial Plan
Determinants	2016	2017	2018	2019	2020	2021
Capital replacement reserve - opening balance	-	-	-	-	-	-
Capital replacement reserve - Capital expenditure	-	-	-	-	-	-
Capital replacement reserve - balance before transfers	-	-	-	-	-	-
Cash transfer to capital replacement reserve	-	-	-	-	-	663 670 219
Capital replacement reserve - closing balance	-	-	-	-	-	663 670 219
Percentage allocated to following year capital expenditure	100%	100%	100%	100%	100%	100%
Amount allocated to following year capital expenditure	-	-	-	-	-	663 670 218,9

D.1.2.2.4 Forecast borrowing position

An analysis of the forecast borrowing position in Table D-23 and Figure D-22, indicates that the unencumbered portion of the debt ceiling would allow for the inclusion of new external borrowing as a possible funding source.

Table D-23: Unencumbered portion of the debt ceiling

Unencumbered portion of debt ceiling	Current year	MTREF		Longer Term Financial Plan
	2018	2019	2020	2021
Unencumbered portion of debt ceiling: MFMA	752 927 361	2 069 382 663	3 381 145 465	4 636 868 270

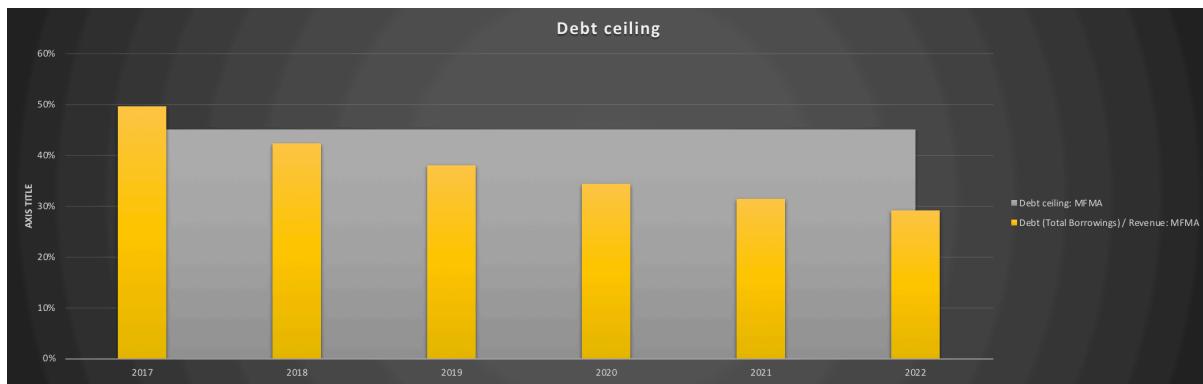


Figure D-22: Forecast debt ceiling utilisation

A detailed analysis of the measurements against MFMA ratio requirements, further supports the possible utilisation of external borrowing as funding source.

Cognisance should however be taken of the effect that it may have on the liquidity position. The results of such a simulation is presented as part of the resourcing plan in section D.2.

Table D-24: Detailed forecast borrowing position analysis

Borrowing position - status quo							
Borrowing requirements	City of Tshwane	MFMA					
Capital Cost (Interest Paid and Redemption) as a % of Total Operating Expenditure			6%-8%				
Debt (Total Borrowings) / Revenue			<45%				
Interest Paid/Total Operating expenditure			N/A				
Operating Cash Surplus before loan repayments/Total Repayments (Debt Service Cover Ratio (DSCR))			N/A				

Determinants	Previous year (audited)	Previous year (unaudited)	Current year	MTREF			Longer Term Financial Plan
	2016	2017	2018	2019	2020	2021	
Interest paid on external debt	-1 061 586 522	-1 205 642 506	-1 331 590 145	-1 232 807 582	-1 175 139 267	-1 125 634 144	-1 084 349 155
Debt repayment - capital	-687 294 188	-732 530 217	-734 692 170	-788 400 914	-906 999 192	-1 016 608 913	-1 110 678 423
Total operating expenditure (incl debt capital repayment) (excl conditional grants)	-26 132 035 759	-28 291 093 553	-30 643 753 008	-32 587 255 782	-34 844 373 320	-36 816 007 691	-39 768 573 370
Capital Cost (Interest Paid and Redemption) as a % of Total Operating Expenditure: MFMA	6,7%	6,9%	6,7%	6,2%	6,0%	5,8%	5,5%
Total operating income (excluding conditional operating and capital grants)	23 690 681 448	26 264 290 429	28 199 269 612	29 942 771 580	31 881 678 703	34 012 366 916	36 267 503 758
Total debt	11 905 480 681	13 018 516 917	11 936 743 964	11 404 864 548	10 965 609 951	10 668 696 843	10 538 018 420
Debt (Total Borrowings) / Revenue: MFMA	50,3%	49,6%	42,3%	38,1%	34,4%	31,4%	29,1%
Interest paid on external debt	-1 061 586 522	-1 205 642 506	-1 331 590 145	-1 232 807 582	-1 175 139 267	-1 125 634 144	-1 084 349 155
Total operating expenditure (incl debt capital repayment) (excl conditional grants)	-26 132 035 759	-28 291 093 553	-30 643 753 008	-32 587 255 782	-34 844 373 320	-36 816 007 691	-39 768 573 370
Interest Paid/Total Operating expenditure	4,1%	4,3%	4,3%	3,8%	3,4%	3,1%	2,7%
Net Cash operating surplus/(deficit)	758 419 851	710 953 326	1 345 466 835	2 249 054 646	2 317 676 431	3 994 329 503	3 744 876 331
Interest earned - investments	55 999 525	105 227 293	79 492 589	74 608 912	79 433 982	82 611 341	82 611 341
Operating expenses - cash reserved	189 585 055	133 734 663	123 833 264	140 766 093	153 576 439	129 336 441	140 872 783
Total repayment	1 748 880 710	1 938 172 723	2 066 282 315	2 021 208 496	2 082 138 459	2 142 243 057	2 195 027 578
Operating Cash Surplus after change in cash reserved for operating expenses & before debt service/Total Repayments (Debt Service Cover Ratio (DSCR))	0,36	0,35	0,63	1,08	1,08	1,84	1,68

Notes: Items highlighted in red do not meet the requirements whereas items marked in green do meet the requirements

D.2 Resourcing the Metro's Project Pipeline / Spatial Budget Mix

D.2.1 Resourcing plan

Please note: This section should be read in conjunction with section D.1. and in particular section D.1.2.

The resourcing plan addresses funding needs of the integrated operational and capital budget as presented in section D.1.2. Due to the fact that the capital budget includes the Catalytic Urban Development Programme, it is also addressed as part of the resourcing plan.

D.2.1.1 Background information

The City of Tshwane has indicated that it plans to utilise long term external borrowing as part of funding its budget. As a result, a simulation inclusive of the long-term debt instruments in Table D-25 was performed.

Table D-25: Proposed long term debt

Loan details	Loan 1	Loan 2	Loan 3
Capital loan amount	1 000 000 000	1 000 000 000	1 300 000 000
Annual interest rate	8,250%	8,250%	8,250%
Loan term in years	15,00	15,00	15,00
Repayment frequency	Semi-annual	Semi-annual	Semi-annual
Date on which capital received	2017/07/31	2018/07/31	2019/07/31
First repayment date	2018/01/31	2019/01/31	2020/01/31
Payment type	End of period	End of period	End of period

The results of the simulation in the new debt only position (refer to the budget simulation process under section D for a detailed explanation of this position) is included as part of the resourcing plan.

D.2.1.2 The Operational and Capital Budget funding envelopes – new borrowing

The inclusion of additional capital and interest repayments do not have a significant effect on the funding position of the operational budget. As presented in

Table D-26 and Figure D-23, it remains fully funded with a surplus across the forecast horizon.

Table D-26: Operational budget funding position inclusive of new borrowing

Operational budget funding position	Previous year (audited)	Previous year (unaudited)	Current year	MTREF			Longer Term Financial Plan
	2016	2017	2018	2019	2020	2021	2022
Cash operating expenditure	22 349 381 936	23 954 197 894	25 440 197 065	27 129 390 183	28 972 307 455	30 524 344 745	32 214 818 141
Working capital adjustments	526 880 136	1 429 046 720	1 334 114 184	489 718 963	512 262 034	-588 917 402	225 199 293
Loss on disposal of PPE	-	64 865 196	-1 062	-1 125	-1 200	-1 272	-1 348
Interest paid on external debt	1 061 586 522	1 205 642 506	1 331 590 145	1 232 807 582	1 175 139 267	1 125 634 144	1 084 349 155
Interest paid on external debt - New debt	-	-	41 250 000	121 559 491	211 119 051	255 383 404	244 259 605
Debt repayment - capital	687 294 188	732 530 217	734 692 170	788 400 914	906 999 192	1 016 608 913	1 110 678 423
Debt repayment - capital - New debt	-	-	17 460 996	54 573 498	100 049 229	132 109 171	143 232 970
Operational project expenditure	-	-	-	-	-	-	-
Total operational expenditure	24 625 142 782	27 386 282 533	28 899 303 499	29 816 449 506	31 877 875 028	32 465 161 703	35 022 536 238
Funded by:							
Total operating income (excl conditional operating and capital grants, excl investment income)	23 634 681 923	26 159 063 136	28 119 777 023	29 868 162 668	31 802 244 721	33 929 755 574	36 184 892 417
Investment income	55 999 525	105 227 293	79 492 589	74 608 912	79 433 982	82 611 341	82 611 341
Conditional operational grants received (excl Equitable Share allocation)	1 862 436 859	1 948 305 797	2 026 743 871	2 021 229 490	2 086 203 290	2 167 409 083	2 297 453 628
Bank overdraft utilised	-	-	-	-	-	-	-
Total operational funding	25 553 118 307	28 212 596 226	30 226 013 483	31 964 001 070	33 967 881 993	36 179 775 999	38 564 957 387
Funding surplus/(deficit)	927 975 525	826 313 693	1 326 709 984	2 147 551 565	2 090 006 964	3 714 614 296	3 542 421 149
Funding as a percentage of operational expenditure							
Total operating income %	96%	96%	97%	100%	100%	105%	103%
Investment income %	0%	0%	0%	0%	0%	0%	0%
Conditional operational grants %	8%	7%	7%	7%	7%	7%	7%
Bank overdraft %	0%	0%	0%	0%	0%	0%	0%
% funding surplus	4%	3%	5%	7%	7%	11%	10%
% alternative funding required for shortfall	0%	0%	0%	0%	0%	0%	0%

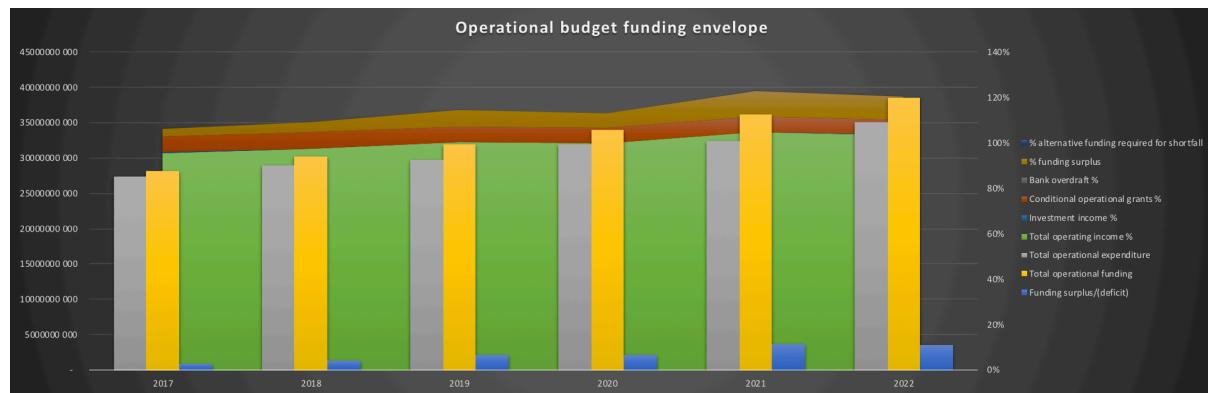


Figure D-23: Operational budget funding envelope inclusive of new borrowing

The inclusion of new debt as a funding source in the capital budget shortfall, dramatically reduces the capital budget funding shortfall from 2017/18 – 2019/20. Table D-27 and Figure D-24 furthermore indicates that the liquidity position is affected positively to the point where internal funding through the Capital Replacement Reserve becomes available in the two outer years.

However, it is likely that the remaining shortfall in the first three years would have to be covered by the operational budget funding surplus, which would place an increased strain on the liquidity position.

Table D-27: Capital budget funding position inclusive of new borrowing

Capital budget funding position	Previous year (audited)	Previous year (unaudited)	Current year	MTREF			Longer Term Financial Plan
Determinants	2016	2017	2018	2019	2020	2021	2022
Capital expenditure (approved)	3 968 594 186	3 232 827 753	3 741 391 688	4 015 697 060	3 988 164 480	5 054 392 539	5 626 758 447
Funded by:							
Conditional capital grants received	2 452 210 170	2 355 387 259	2 449 910 336	2 168 935 510	2 301 280 710	2 554 501 580	2 707 771 675
New debt	1 200 000 000	1 000 000 000	1 000 000 000	1 000 000 000	1 300 000 000	-	-
Capital replacement reserve - Capital expenditure	-	-	-	-	-	6 693 185	1 478 398 250
Total funding	3 652 210 170	3 355 387 259	3 449 910 336	3 168 935 510	3 601 280 710	2 561 194 765	4 186 169 925
Funding surplus/(deficit)	-316 384 016	122 559 506	-291 481 352	-846 761 550	-386 883 770	-2 493 197 773	-1 440 588 522
Funding as a percentage of capital expenditure							
Conditional capital grants %	62%	73%	65%	54%	58%	51%	48%
External borrowing %	30%	31%	27%	25%	33%	0%	0%
CRR %	0%	0%	0%	0%	0%	0%	26%
% funding surplus	0%	4%	0%	0%	0%	0%	0%
% alternative funding required for shortfall	8%	0%	8%	21%	10%	49%	26%

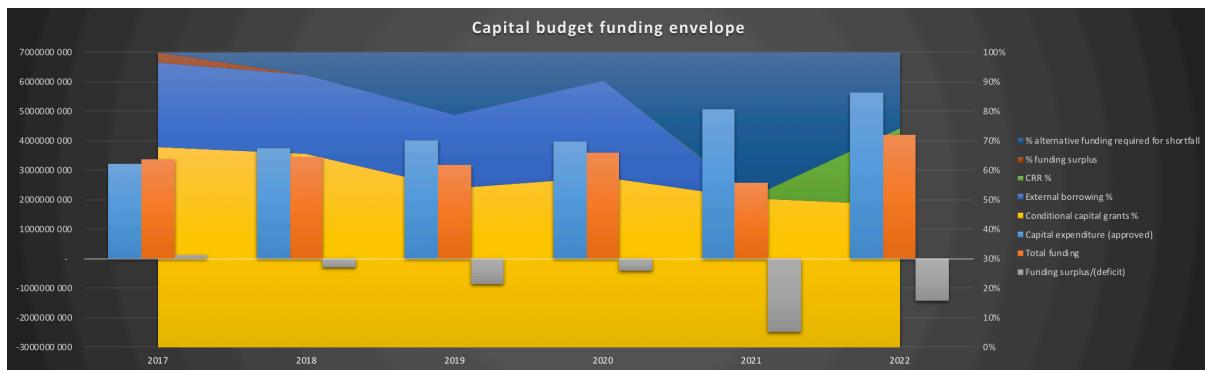


Figure D-24: Capital budget funding envelope inclusive of new borrowing

D.2.1.3 Forecast cash position – new borrowing

Table D-28: Forecast cash and investments position inclusive of new borrowing

Line items	Previous year (audited)	Previous year (unaudited)	Current year	MTREF			Longer Term Financial Plan
	2016	2017	2018	2019	2020	2021	2022
Call Investment Deposits	493 261 328	1 087 430 061	-	-	-	-	-
Cash	57 158 390	74 581 166	-	-	-	-	-
Cash and investments (excl overdraft) - opening balance	550 419 718	1 162 011 227	2 110 884 426	3 146 113 058	4 439 585 073	6 140 587 360	7 385 104 150
Net cash surplus/(deficit)	611 591 509	948 873 199	1 035 228 632	1 293 472 015	1 701 002 287	1 244 516 790	652 730 783
Call Investment Deposits	1 087 430 061	1 712 108 929	-	-	-	-	-
Cash	74 581 166	398 775 497	-	-	-	-	-
Cash and investments (excl overdraft) - closing balance	1 162 011 227	2 110 884 426	3 146 113 058	4 439 585 073	6 140 587 360	7 385 104 150	8 037 834 934

As is evident from Table D-28 the inclusion of new borrowing has a net positive effect on the total cash and investments position over the forecast horizon.

However, the surplus net cash position reduces in year 4 and 5 due to the increased burden of the capital and interest repayments. This is confirmation of the possible attention areas identified in section D.1.2.2.2. In the absence of addressing the underlying structural issues, it is evident that merely maintaining the status quo position of the City of Tshwane would lead to increased difficulty in managing its cash position over the medium term.

A further factor which requires attention is the inclusion of the operational income and expense effects of capital investment. Although the simulation and CaPS allow for the inclusion thereof, the information is not yet being included at a project level and is therefore not considered in the simulation. The simulation does however include a programmatic calculation of depreciation on applicable capital projects.

Please refer to Table 2 in Addendum A for the detailed cash flow forecast inclusive of new borrowing.

D.2.1.4 Forecast liquidity position – new borrowing

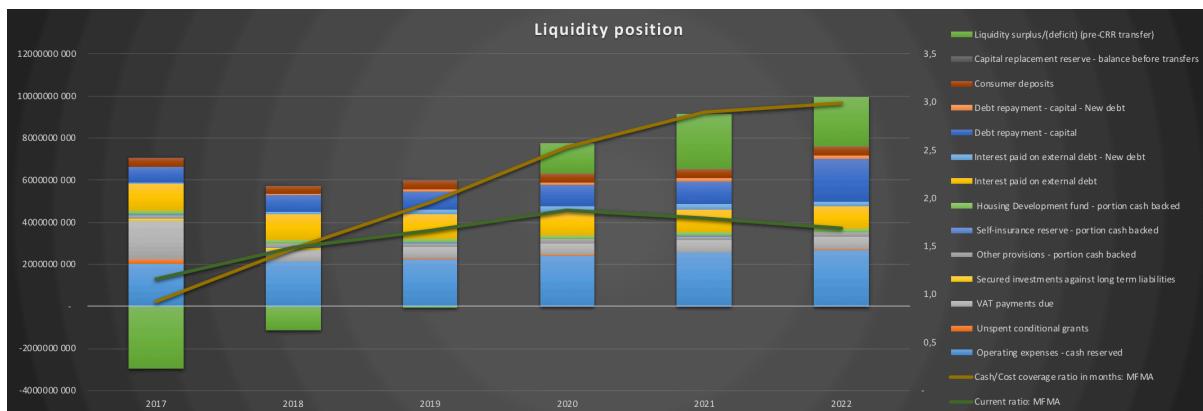


Figure D-25: Forecast liquidity position inclusive of new borrowing

As can be expected, the liquidity injection of the new borrowing has a positive effect on the liquidity position of the City of Tshwane as of the second forecast year. It is however important to note that the liquidity surplus tapers off again in the last year. This is further confirmation of the issues raised in the previous cash flow position analysis.

The MFMA ratio requirements are met across the forecast horizon as per

Table D-29. The liquidity surplus also translates into contributions to the Capital Replacement Reserve, which is available for funding of capital investment in the following year.

As mentioned above, the liquidity surplus in the last year shrinks significantly which indicates that the underlying issues need to be addressed as identified in section D.1.2.2.2.

Similar to the previous section, inclusion of the operational income and expense effects of capital projects would contribute to determining the longer-term effects of the capital investment.

Table D-29: Detailed analysis of the liquidity position inclusive of new borrowing

Liquidity position - new debt only							
Liquidity requirements	City of Tshwane	MFMA					
Cash/Cost coverage ratio in months			1-3				
MFMA formula: ((Cash and Cash Equivalents - Unspent Conditional Grants - Overdraft) + Short Term Current ratio)			1.5-2.1				
MFMA formula: (Current assets/Current liabilities)							
Determinants	Previous year (audited)	Previous year (unaudited)	Current year	MTREF			Longer Term Financial Plan
	2016	2017	2018	2019	2020	2021	2022
<i>Cash operating expenditure</i>	-22 349 381 936	-23 954 197 894	-25 440 197 065	-27 129 390 183	-28 972 307 455	-30 524 344 745	-32 214 818 141
<i>Months cash coverage</i>	1	1	1	1	1	1	1
Operating expenses - cash reserved	1 862 448 495	1 996 183 158	2 120 016 422	2 260 782 515	2 414 358 955	2 543 695 395	2 684 568 178
Unspent conditional grants	130 291 177	260 923 812	23 802 840	21 679 355	23 082 807	23 082 807	23 082 807
VAT payments due	755 994 586	1 779 050 282	516 436 141	531 929 225	547 887 102	564 323 715	581 253 426
Secured investments against long term liabilities	119 116 528	128 505 761	129 718 732	-	-	-	-
Other provisions - portion cash backed	179 960 106	166 205 145	176 710 285	185 373 617	194 266 486	203 585 970	213 358 097
Self-insurance reserve - portion cash backed	28 199 547	28 000 000	28 300 000	28 300 000	28 300 000	28 300 000	28 300 000
Housing Development fund - portion cash backed	156 442 652	156 442 652	156 442 652	156 442 652	156 442 652	156 442 652	156 442 652
Interest paid on external debt	1 205 642 506	1 331 590 145	1 232 807 582	1 175 139 267	1 125 634 144	1 084 349 155	1 069 362 939
Interest paid on external debt - New debt	-	41 250 000	121 559 491	211 119 051	255 383 404	244 259 605	232 199 165
Debt repayment - capital	732 530 217	734 692 170	788 400 914	906 999 192	1 016 608 913	1 110 678 423	2 023 327 985
Debt repayment - capital - New debt	-	17 460 996	54 573 498	100 049 229	132 109 171	143 232 970	155 293 410
Consumer deposits	375 949 547	407 336 926	395 755 286	403 670 392	411 743 800	420 905 487	447 452 892
Capital replacement reserve - balance before transfers	-	-	-	-	-	-	-
Minimum liquidity required	5 546 575 361	7 047 641 047	5 744 523 842	5 981 484 495	6 305 817 433	6 522 856 179	7 614 641 551
Cash and investments (excl overdraft) - closing balance	1 162 011 227	2 110 884 426	3 146 113 058	4 439 585 073	6 140 587 360	7 385 104 150	8 037 834 934
Consumer debtors - current to 60 days	2 402 951 601	1 963 563 225	1 452 709 006	1 541 274 608	1 634 189 416	1 780 424 834	1 893 685 466
Available bank overdraft facility at year end	-	-	-	-	-	-	-
Total cash and near cash at year end	3 564 962 828	4 074 447 651	4 598 822 064	5 980 859 680	7 774 776 776	9 165 528 984	9 931 520 400
Liquidity surplus/(deficit) (pre-CRR transfer)	-1 981 612 533	-2 973 193 396	-1 145 701 778	-624 815	1 468 959 343	2 642 672 805	2 316 878 849
Cash/Cost coverage ratio in months: MFMA	0,6	0,9	1,5	2,0	2,5	2,9	3,0
Current ratio: MFMA	1,0	1,2	1,5	1,7	1,9	1,8	1,7

Notes: Items highlighted in red do not meet the requirements whereas items marked in green do meet the requirements

Movement in Capital Replacement Reserve

Determinants	Previous year (audited)	Previous year (unaudited)	Current year	MTREF			Longer Term Financial Plan
	2016	2017	2018	2019	2020	2021	2022
Capital replacement reserve - opening balance	-	-	-	-	-	-	1 468 959 343,1
Capital replacement reserve - Capital expenditure	-	-	-	-	-	-	-1 468 959 343,1
Capital replacement reserve - balance before transfers	-	-	-	-	-	-	-
Cash transfer to capital replacement reserve	-	-	-	-	-	1 468 959 343,1	2 642 672 805,4
Capital replacement reserve - closing balance	-	-	-	-	-	1 468 959 343,1	2 642 672 805,4
Percentage allocated to following year capital expenditure	100%	100%	100%	100%	100%	100%	100%
Amount allocated to following year capital expenditure	-	-	-	-	-	1 468 959 343	2 642 672 805

D.2.1.5 Forecast borrowing position – new borrowing

Table D-30: Unencumbered portion of the debt ceiling inclusive of new borrowing

Unencumbered portion of debt ceiling	Current year	MTREF			Longer Term Financial Plan
	2018	2019	2020	2021	2022
Unencumbered portion of debt ceiling: MFMA	-	251 953 634	640 000 635	2 027 832 611	3 316 555 582

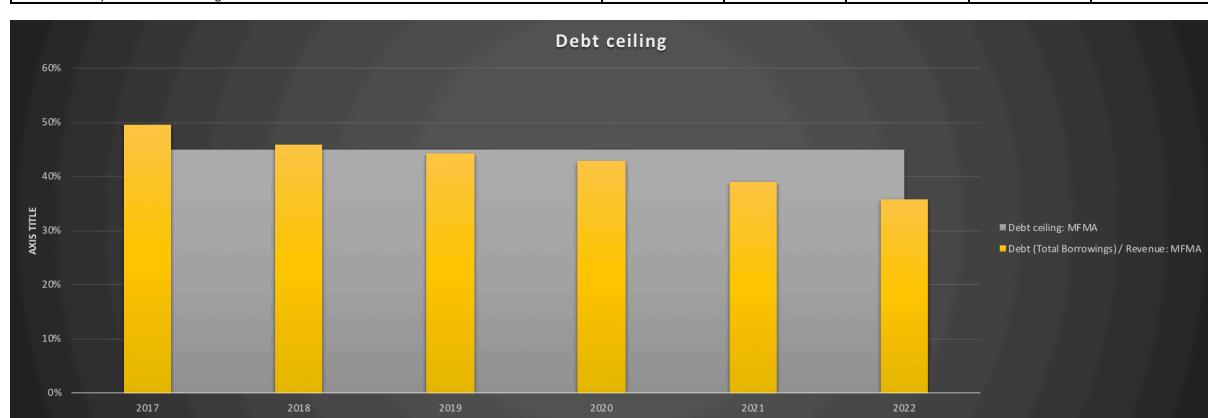


Figure D-26: Forecast debt ceiling utilisation inclusive of new borrowing

The inclusion of new borrowing does increase the City's borrowing slightly above the MFMA ratio requirement in the 2017/18 year, but it moves within the boundary again from the 2018/19 year onwards as is evidenced by Figure D-26.

Although Table D-30 indicates significant availability of unencumbered debt ceiling in the two last years, these results should be viewed along with the indications as presented in the cash flow and liquidity position analyses.

Table D-31 presents the detailed analysis underlying the summarised findings of Figure D-26 and Table D-30.

Table D-31: Detailed analysis of the forecast borrowing position inclusive of new debt

Borrowing position - new debt only								
Borrowing requirements	City of Tshwane	MFMA						
Capital Cost (Interest Paid and Redemption) as a % of Total Operating Expenditure		6%-8%						
Debt (Total Borrowings) / Revenue		<45%						
Interest Paid/Total Operating expenditure		N/A						
Operating Cash Surplus before loan repayments/Total Repayments (Debt Service Cover Ratio (DSCR))		N/A						
Determinants	Previous year (audited)	Previous year (unaudited)	Current year	MTREF			Longer Term Financial Plan	
	2016	2017	2018	2019	2020	2021		2022
Interest paid on external debt	-1 061 586 522	-1 205 642 506	-1 331 590 145	-1 232 807 582	-1 175 139 267	-1 125 634 144	-1 084 349 155	
Interest paid on external debt - New debt	-	-	-41 250 000	-121 559 491	-211 119 051	-255 383 404	-244 259 605	
Debt repayment - capital	-687 294 188	-732 530 217	-734 692 170	-788 400 914	-906 999 192	-1 016 608 913	-1 110 678 423	
Debt repayment - capital - New debt	-	-	-17 460 996	-54 573 498	-100 049 229	-132 109 171	-143 232 970	
Total operating expenditure (incl debt capital repayment) (excl conditional grants)	-26 132 035 759	-28 291 093 553	-30 702 464 004	-32 763 388 771	-35 155 541 599	-37 203 500 265	-40 156 065 944	
Capital Cost (Interest Paid and Redemption) as a % of Total Operating Expenditure: MFMA	6,7%	6,9%	6,9%	6,7%	6,8%	6,8%	6,4%	
Total operating income (excluding conditional operating and capital grants)	23 690 681 448	26 264 290 429	28 199 269 612	29 942 771 580	31 881 678 703	34 012 366 916	36 267 503 758	
Total debt	11 905 480 681	13 018 516 917	12 919 282 968	13 222 293 578	13 706 754 781	13 277 732 501	13 003 821 109	
Debt (Total Borrowings) / Revenue: MFMA	50,3%	49,6%	45,8%	44,2%	43,0%	39,0%	35,9%	
Interest paid on external debt	-1 061 586 522	-1 205 642 506	-1 331 590 145	-1 232 807 582	-1 175 139 267	-1 125 634 144	-1 084 349 155	
Interest paid on external debt - New debt	-	-	-41 250 000	-121 559 491	-211 119 051	-255 383 404	-244 259 605	
Total operating expenditure (incl debt capital repayment) (excl conditional grants)	-26 132 035 759	-28 291 093 553	-30 702 464 004	-32 763 388 771	-35 155 541 599	-37 203 500 265	-40 156 065 944	
Interest Paid/Total Operating expenditure	4,1%	4,3%	4,5%	4,1%	3,9%	3,7%	3,3%	
Net Cash operating surplus/(deficit)	758 419 851	710 953 326	1 345 466 835	2 249 054 646	2 317 676 431	3 994 329 503	3 744 876 331	
Interest earned - Investments	55 999 525	105 227 293	79 492 589	74 608 912	79 433 982	82 611 341	82 611 341	
Operating expenses - cash reserved	189 585 055	133 734 663	123 833 264	140 766 093	153 576 439	129 336 441	140 872 783	
Total repayment	1 748 880 710	1 938 172 723	2 124 993 311	2 197 341 484	2 393 306 739	2 529 735 631	2 582 520 152	
Operating Cash Surplus after change in cash reserved for operating expenses & before debt service/Total Repayments (Debt Service Cover Ratio (DSCR))	0,36	0,35	0,61	0,99	0,94	1,56	1,43	

Notes: Items highlighted in red do not meet the requirements whereas items marked in green do meet the requirements

D.2.2 Spatial Budget Mix

D.2.2.1 Introduction

Budget guidelines relating to the compilation of the 2018/19 capital budgets were compiled in consultation with the Finance Department, Economic Development and Spatial Planning Department, City Strategy and Performance Management the IDP Office. Departments used these budget guidelines as a basis for their MTREF planning. All capital project requests were captured on the Capital Planning System (CaPS) during a one-on-one capturing session scheduled with the various departments during November 2017. Once the departmental indicatives were received from the Finance Department's 2017/18 Annexure B, an additional amendment of budgets occurred based on budget indicatives issued to departments (January 2018).

The compilation of the capital budget in terms of internal capacity (council funds) is based on the application of sound financial management principles to ensure that a funded budget is tabled. Taking this into consideration the Capital Budget Demands versus the Budget Indicatives (as per the Annexure A) for the 2018/19, 2019/2020 and 2020/21 financial years is shown in Figure D-27.

The capital budget Indicatives amounts to only 322 projects within the CaPS system. The total number of projects on the system are 1484, thus only 22% of the number of projects has been allocated a budget within the budget indicatives. The table below shows the Budget Indicatives and the changes made by each adjustment to the budget and the comparison of the demand and the Budget Fitted to the supply of the Capital Budget.

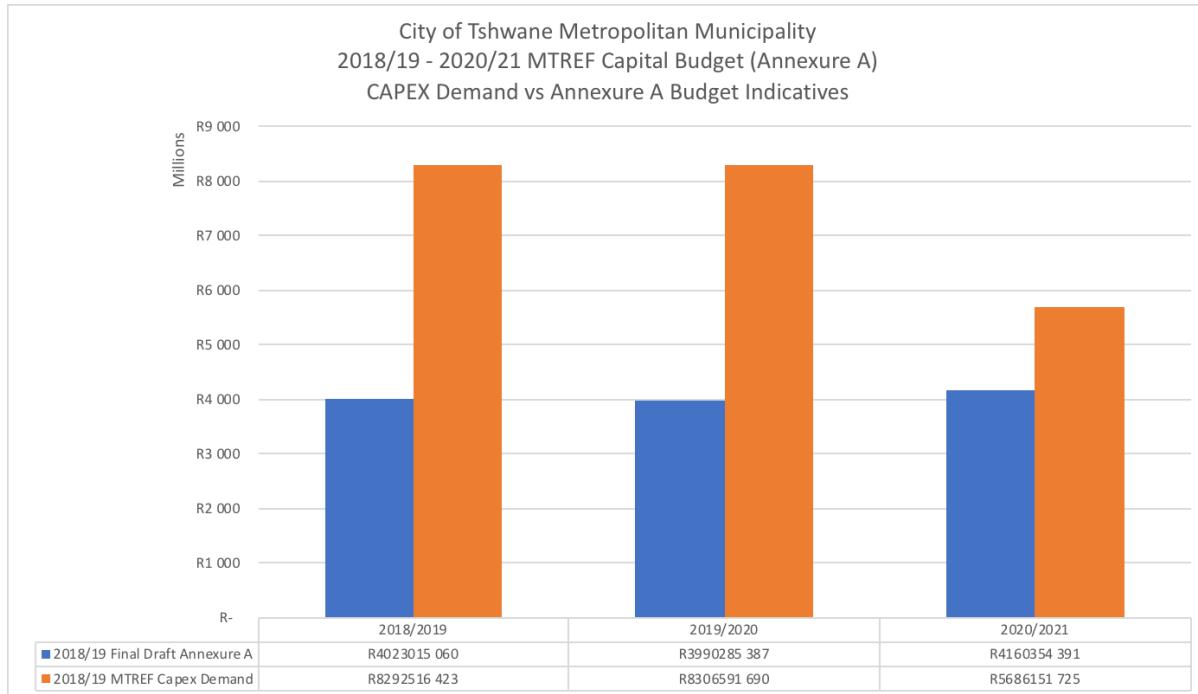


Figure D-27: 2018/19 MTREF Capital Budget Demand vs 2018/19 MTREF Capital Budget Indicatives

Table D-32: 2018/19 MTREF Capital Budget Indicatives

Budget Description	2016/17	2017/2018	2018/2019	2019/2020	2020/2021
Budget Indicatives 2016/17	R4 465 208 687	R3 704 064 120	R3 987 509 560		
Approved 2016/17 Budget (Annex A)	R4 465 208 687	R3 704 064 120	R3 993 509 560		
Adjusted 2016/17 Budget (Annex B)	R4 524 586 409	R3 745 956 118	R4 037 831 560		
Approved 2017/18 Budget (Annex A)		R3 942 758 576	R3 824 753 510	R4 392 400 822	
Adjusted 2017/18 Budget (Annex B)		R3 723 200 044	R3 476 967 060	R3 973 164 480	
Approved 2018/19 Budget (Annex A)			R4 023 015 060	R3 990 285 387	R4 160 354 391
2018/19 MTREF Capex Demand			R8 292 516 423	R8 306 591 690	R5 686 151 725
% Demand vs 2018/19 Indicative			206%	208%	137%

D.2.3 2018/19 MTREF Capital Budget (Annexure A) by MSCOA Expenditure Type

This table brings together the core elements of the capital budget and summarises the capital programme in terms of Capital, Operational and Default Transactions as per the mSCOA expenditure classification. The objective is to provide a complete picture of the municipality's expenditure of the capital budget.

Table D-33: 2018/19 MTREF Capital Budget (Annexure A) by Expenditure Type

Expenditure Type	2018 / 2019	%	2019 / 2020	%	2020 / 2021	%
Capital	R4 023 015 060	100%	R3 990 285 387	100%	R4 160 354 391	100%
Operational	R0	0%	R0	0%	R0	0%
Grand Total	R4 023 015 060	100%	R3 990 285 387	100%	R4 160 354 391	100%

From the above table, 100% of the capital budget has been allocated for the capital project/assets in the 2018/19, 2019/20 and 2020/21.

D.2.4 2018/19 MTREF Capital Budget (Annexure A) by Funding Source Indicatives

A comparison between the 2017/18 and 2018/19 MTREF capital budget by funding source is shown below.

Table D-34: 2017/18 MTREF Capital Budget (Annexure A) by Funding Source

Funding Source Description	2017/2018	%	2018/2019	%	2019/2020	%
Council Funding	R376 000 000	9,74%	R500 000 000	13,08%	R650 000 000	14,73%
PTIS- Public Transport, Infrastructure Systems Grant	R679 189 840	17,59%	R396 285 230	10,37%	R426 086 000	9,65%

Funding Source Description	2017/2018	%	2018/2019	%	2019/2020	%
NDPG- Neighbourhood Development Partnership Grant	R20 000 000	0,52%	R30 000 000	0,78%	R45 000 000	1,02%
USDG - Urban Settlements Development Grant	R1 567 922 550	40,61%	R1 646 976 580	43,08%	R1 739 911 310	39,42%
INEP- Integrated National Electrification Programme	R30 000 000	0,78%	R40 000 000	1,05%	R40 000 000	0,91%
CRR- Capital Replacement Reserve	R5 000 000	0,13%	R5 000 000	0,13%	R5 000 000	0,11%
EEDSM- Energy Efficiency Demand Side Management	R0	0,00%	R0	0,00%	R0	0,00%
CLS - Community Library Services	R9 507 000	0,25%	R10 000 000	0,26%	R10 500 000	0,24%
Borrowings	R1 000 000 000	25,90%	R1 000 000 000	26,16%	R1 300 000 000	29,46%
Public Contributions & Donations	R100 000 000	2,59%	R150 000 000	3,92%	R150 000 000	3,40%
Social Infrastructure Grant	R34 000 000	0,88%	R0	0,00%	R0	0,00%
LG SETA Discretionary Allocation	R7 000 000	0,18%	R7 000 000	0,18%	R7 000 000	0,16%
Integrated City Development Grant	R32 664 650	0,85%	R37 673 700	0,99%	R39 783 400	0,90%
Total	R3 861 284 040	100,00%	R3 822 935 510	100,00%	R4 413 280 710	100,00%

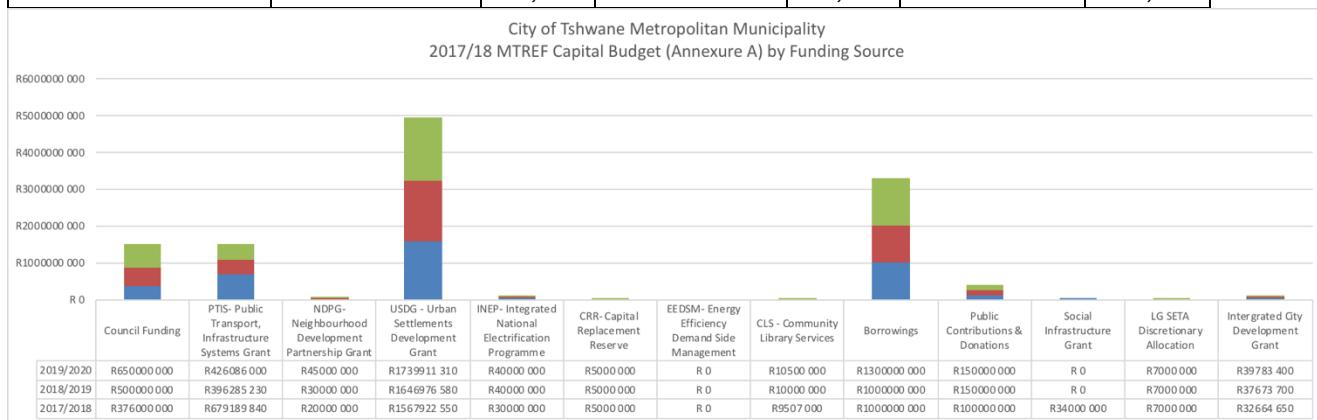


Figure D-28: 2017/18 MTREF Capital Budget (Annexure A) by Funding Source

Table D-35: 2018/19 MTREF Capital Budget (Annexure A) Funding Source

Funding Source Description	2018/19	%	2019/20	%	2020/21	%
001 Council Funding	R157 318 000	4%	R302 120 907	8%	R300 852 811	7%
002 PTIS- Public Transport, Infrastructure Systems Grant	R509 162 220	13%	R475 637 500	12%	R524 957 960	13%
003 NDPG- Neighbourhood Development Partnership Grant	R7 105 000	0,2%	R19 635 000	0,5%	R55 000 000	1,3%
005 USDG - Urban Settlements Development Grant	R1 557 438 790	39%	R1 636 597 580	41%	R1 726 644 620	42%
006 INEP- Integrated National Electrification Programme	R40 000 000	1%	R38 000 000	1%	R32 000 000	1%
007 CRRF- Capital Replacement Reserve Fund	R5 000 000	0%	R5 000 000	0%	R5 000 000	0%
008 EEDSM- Energy Efficiency Demand Side Management	R10 000 000	0%	R15 000 000	0%	R15 000 000	0%
013 CLS - Community Library Services	R10 000 000	0%	R10 500 000	0%	R11 000 000	0%
015 Borrowings	R1 500 000 000	37%	R1 300 000 000	33%	R1 300 000 000	31%

Funding Source Description	2018/19	%	2019/20	%	2020/21	%
016 Public Contributions and Donations	R150 000 000	4%	R150 000 000	4%	R150 000 000	4%
017 Social Infrastructure Grant	R30 730 000	1%	R0	0%	R0	0%
020 - LG SETA Allocation	R8 000 000	0%	R0	0%	R0	0%
021 ICDG - Integrated City Development Grant	R38 261 050	1%	R37 794 400	1%	R39 899 000	1%
Grand Total	R4 023 015 060	100%	R3 990 285 387	100%	R4 160 354 391	100%

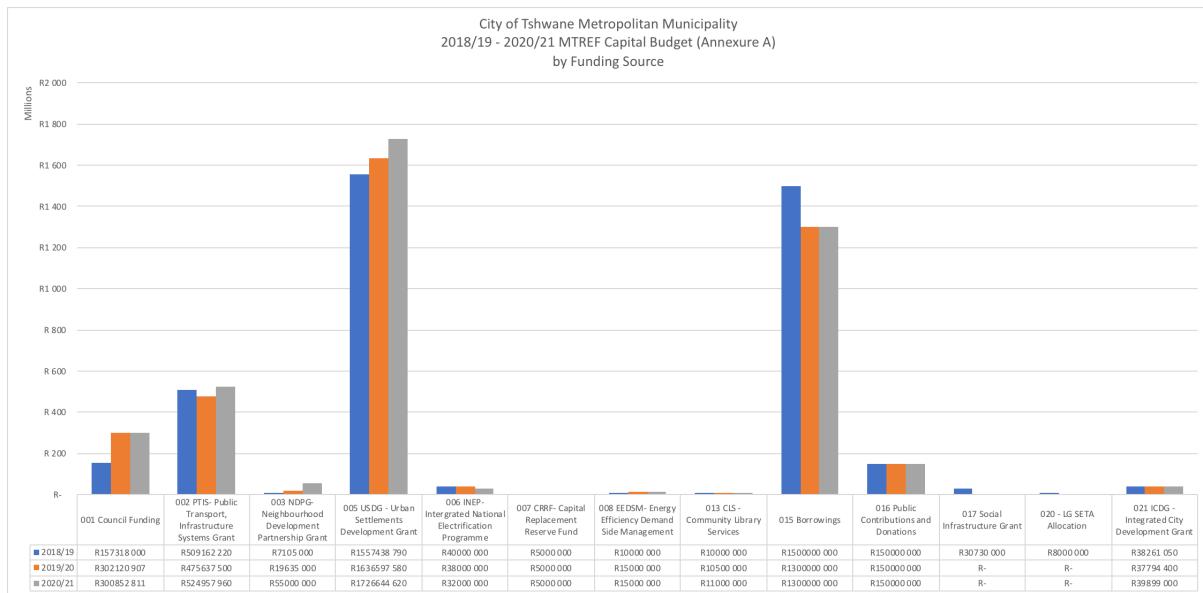


Figure D-29: 2018/19 MTREF Capital Budget (Annexure A) by Funding Source

Table D-36: 2017/18 MTREF Capital Budget (Annexure A) vs 2018/19 MTREF Capital Budget (Annexure A) Funding Code Comparison

Funding Source Description	2017/2018 MTREF	%	2018/2019 MTREF	%
Council Funding	R376 000 000	9,74%	R157 318 000	3,91%
Public Transport, Infrastructure Systems Grant	R679 189 840	17,59%	R509 162 220	12,66%
Neighbourhood Development Partnership Grant	R20 000 000	0,52%	R7 105 000	0,18%
Urban Settlements Development Grant	R1 567 922 550	40,61%	R1 557 438 790	38,71%
Integrated National Electrification Programme	R30 000 000	0,78%	R40 000 000	0,99%
Capital Replacement Reserve	R5 000 000	0,13%	R5 000 000	0,12%
Community Library Services	R9 507 000	0,25%	R10 000 000	0,25%
Borrowings	R1 000 000 000	25,90%	R1 500 000 000	37,29%
Public Contributions & Donations	R100 000 000	2,59%	R150 000 000	3,73%
Social Infrastructure Grant	R34 000 000	0,88%	R30 730 000	0,76%
LG SETA Discretionary Allocation	R7 000 000	0,18%	R8 000 000	0,20%
Integrated City Development Grant	R32 664 650	0,85%	R38 261 050	0,95%
Energy Efficiency Demand Side Management		0,00%	R10 000 000	0,25%
Total	R3 861 284 040	100,00%	R4 023 015 060	100,00%

A comparative analysis between the 2017/18 MTREF and the 2018/19 MTREF capital budget funding source indicated that the capital budget funding source reliance on state and provincial grants have decreased slightly. The following key observations can be made:

- Internally generated revenue (Council Funding) amounted to approximately R 376 million (9,74%) in 2017/18 which decreased to R157 million (3,91%) in 2018/19.
- Borrowings which amounted to R1 billion (25,9%) in 2017/18, increased to R1,5 billion (37,29%) in 2018/19.
- Grant funding amounted to R2,33 billion (60%) in 2017/18 which decreased to R 2,142 billion (53%) during 2018/19.

The following should be noted about these conditional grants:

- **Urban Settlements Development Grant (USDG)**

The purpose of the USDG is to assist metropolitan municipalities to improve urban land production to the benefit of poor households, by supplementing the revenues of metropolitan municipalities to: reduce the real average cost of urban land, increase the supply of well-located land, enhance tenure security and quality of life in informal settlements, improve spatial densities and to subsidise the capital costs of acquiring land and providing basic services for poor households. The gazetted allocations in the MTREF 2018/19 amount to R 1,55 billion (39%) for 2018/19, R 1,63 billion (41%) for 2019/20 and R 1,72 billion (42%) during 2020/21. Allocation of the outer year to be gazetted with the approval of the MTREF 2018/19.

- **Public Transport, Infrastructure and Systems Grant**

The purpose of the grant is to provide for accelerated planning, construction and improvement of public and non-motorised transport infrastructure and services. The gazetted allocations in the MTREF 2018/19 amount to R 509 million (13%) for 2018/19, R 475 million (12%) for 2019/20 and R 524 million (13%) during 2020/21. Allocation of the outer year to be gazetted with the approval of the MTREF 2018/19.

- **Neighbourhood Development Partnership Grant**

The purpose of this NDPG grant is to support neighbourhood development projects that provide community infrastructure and create the platform for other public and private sector development, towards improving the quality of life of residents in targeted underserviced neighbourhoods. The gazetted allocations in the MTREF 2018/19 amount to R 7 million (0,2%) for 2018/19, R 19 million (0,5%) for 2019/20 and R 55 million (1%) during 2020/21. Allocation of the outer year to be gazetted with the approval of the MTREF 2018/19.

- **Integrated National Electrification Programme**

The purpose of this grant is to implement the Integrated National Electrification Programme (INEP) by providing capital subsidies to municipalities to address the electrification backlog of occupied residential dwellings, clinics and the installation of bulk infrastructure and rehabilitation and refurbishment of electricity infrastructure to improve the quality of supply. The gazetted allocations in the MTREF 2018/19 amount to R 40 million (1%) for 2018/19, R 38 million (1%) for 2019/20 and R 32 million (1%) during

2020/21. Allocation of the outer year to be gazetted with the approval of the MTREF 2018/19.

D.2.5 2018/19 MTREF Capital Budget (Annexure A) by Departmental Cluster

The 2018/19 MTREF capital budget as per the Annexure A by department is shown in Table D-37.

Table D-37: 2018/19 MTREF Capital Budget (Annexure A) by Department

Department	2018/2019	2019/2020	2020/2021
Airports	R25 500 000	R44 822 420	R35 000 000
Audit and Risk	R40 150 000	R25 150 000	R25 150 000
Communications and Marketing	R4 200 000	R200 000	R200 000
Community and Social Development Services	R30 730 000	R0	R0
Customer Relations Management	R20 100 000	R100 000	R100 000
Economic Development and Spatial Planning	R113 523 700	R169 633 400	R40 850 000
Electricity	R982 154 020	R647 026 071	R687 500 000
Emergency Services	R20 700 000	R44 700 000	R23 200 000
Environmental Management	R51 500 000	R63 000 000	R36 500 000
Financial Services	R86 500 000	R17 500 000	R500 000
Group Property Management	R5 200 000	R5 200 000	R5 200 000
Health	R32 000 000	R39 936 000	R20 000 000
Housing and Human Settlement	R937 258 469	R945 365 000	R960 000 000
Housing Company Tshwane	R500 000	R500 000	R500 000
Information and Communication Technology	R65 000 000	R118 000 000	R130 000 000
Metro Police Services	R11 500 000	R23 500 000	R30 750 000
Office of the City Manager	R22 205 000	R29 735 000	R70 100 000
Public Transport	R506 662 220	R471 637 500	R550 882 978
Regional Operations and Coordination	R4 200 000	R6 200 000	R6 200 000
Roads and Stormwater	R461 998 225	R536 226 509	R672 518 602
Shared Services	R50 000 000	R0	R0
Sports and Recreational Services	R67 300 000	R63 800 000	R156 300 000
Tshwane Economic Development Agency	R318 000	R1 620 907	R352 811
Tshwane Leadership and Management Academy	R8 200 000	R200 000	R200 000
Water and Sanitation	R475 615 426	R736 232 580	R708 350 000
Grand Total	R4 023 015 060	R3 990 285 387	R4 160 354 391

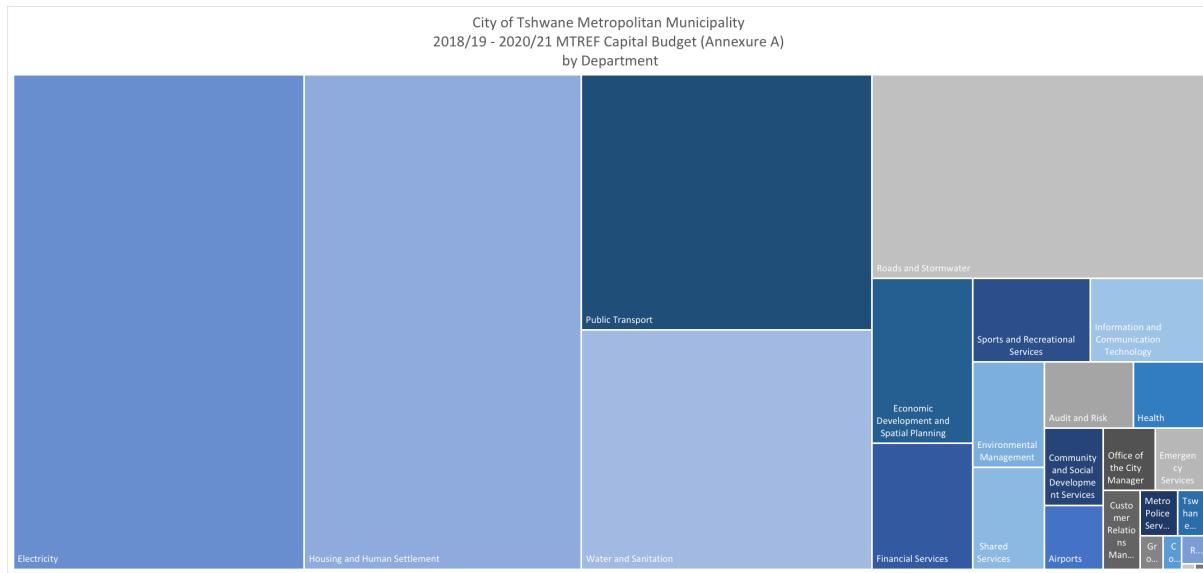


Figure D-30: 2018/19 MTREF Capital Budget (Annexure A) by Department

A large amount of the capital budget demand is allocated to several key infrastructure departments focussing on creating economic infrastructure correlating to Annexure A figures. Table D-37 shows that Roads and Transport (comprising of Airports, Public Transport and Roads and Stormwater), Utilities (comprising of Water and Sanitation and Energy and Electricity) and Housing and Human Settlements (including the Housing Company) account for 84% of the 2018/19 capital budget, 85% of the 2019/20 capital budget and 87% of the 2020/21 capital budget expenditure.

Table D-38: 2018/19 MTREF Capital Budget (Annexure A) focused on Basic Service Delivery

Unit	2018/2019	%	2019/2020	%	2020/2021	%
Housing and Human Settlement	R937 758 469	23%	R945 865 000	24%	R960 500 000	23%
Roads and Transport	R994 160 445	25%	R1 052 686 429	26%	R1 258 401 580	30%
Utility Services	R1 457 769 446	36%	R1 383 258 651	35%	R1 395 850 000	34%
Total of Basic Services	R3 389 688 360	84%	R3 381 810 080	85%	R3 614 751 580	87%
Total Capital Budget	R4 023 015 060	100%	R3 990 285 387	100%	R4 160 354 391	100%

This capital budget distribution is indicative of a basic service delivery focussed budget where significant investment is being focussed on achieving a desirable built environment and urban form. The next section will focus on analysing the 2018/19 MTREF Capital Budget (Annexure A) in terms of the spatial transformation agenda of the city, particularly with regards to the Capital Investment Targeting areas (emanating from the Capital Investment Framework report) as well as the spatial development focus areas highlighted in the Metropolitan Spatial Development Framework (MSDF).

D.2.6 2018/19 MTREF Capital Budget (Annexure A) Spatial Analysis

D.2.6.1 Value of Capital by Region

The regional capital analysis was undertaken by means of the Tshwane Capital Planning system, which allows for the spatial referencing of capital projects. The CaPS system indicates

that 322 projects comprise the 2018/19 MTREF capital budget, of which 239 (74%) of the projects are spatially reference.

The 2018/19 MTREF Capital Budget (Annexure A) analysis indicates that R1,217 billion (30%) of the 2018/19 MTREF capital is City Wide/Administrative HQ, whereas the remainder of the budget is distributed over the various regions (Refer to Table D-39). Region 1, 2, 3 and 6 receive most the capital expenditure, accounting for approximately 55% of the capital demand. Region 1 has the highest capital budget of 19%, followed by Region 3 at 14% and Region 2 at 13% capital budget within the 2018/19 financial year.

Table D-39: 2018/19 MTREF Capital Budget (Annexure A) Regional Analysis

Regions	2018 / 2019	%	2019 / 2020	%	2020 / 2021	%
Region 1	R777 872 489	19,34%	R908 455 509	22,77%	R789 899 000	18,99%
Region 2	R533 367 097	13,26%	R515 189 590	12,91%	R543 518 602	13,06%
Region 3	R563 398 166	14,00%	R774 018 410	19,40%	R574 502 811	13,81%
Region 4	R151 740 000	3,77%	R130 900 000	3,28%	R219 126 018	5,27%
Region 5	R124 000 000	3,08%	R81 500 000	2,04%	R80 201 000	1,93%
Region 6	R356 913 362	8,87%	R358 289 298	8,98%	R480 557 960	11,55%
Region 7	R298 395 000	7,42%	R325 962 580	8,17%	R460 400 000	11,07%
Citywide/ Administrative HQ	R1 217 328 946	30,26%	R895 970 000	22,45%	R1 012 149 000	24,33%
Grand Total	R4 023 015 060	100,00%	R3 990 285 387	100,00%	R4 160 354 391	100,00%

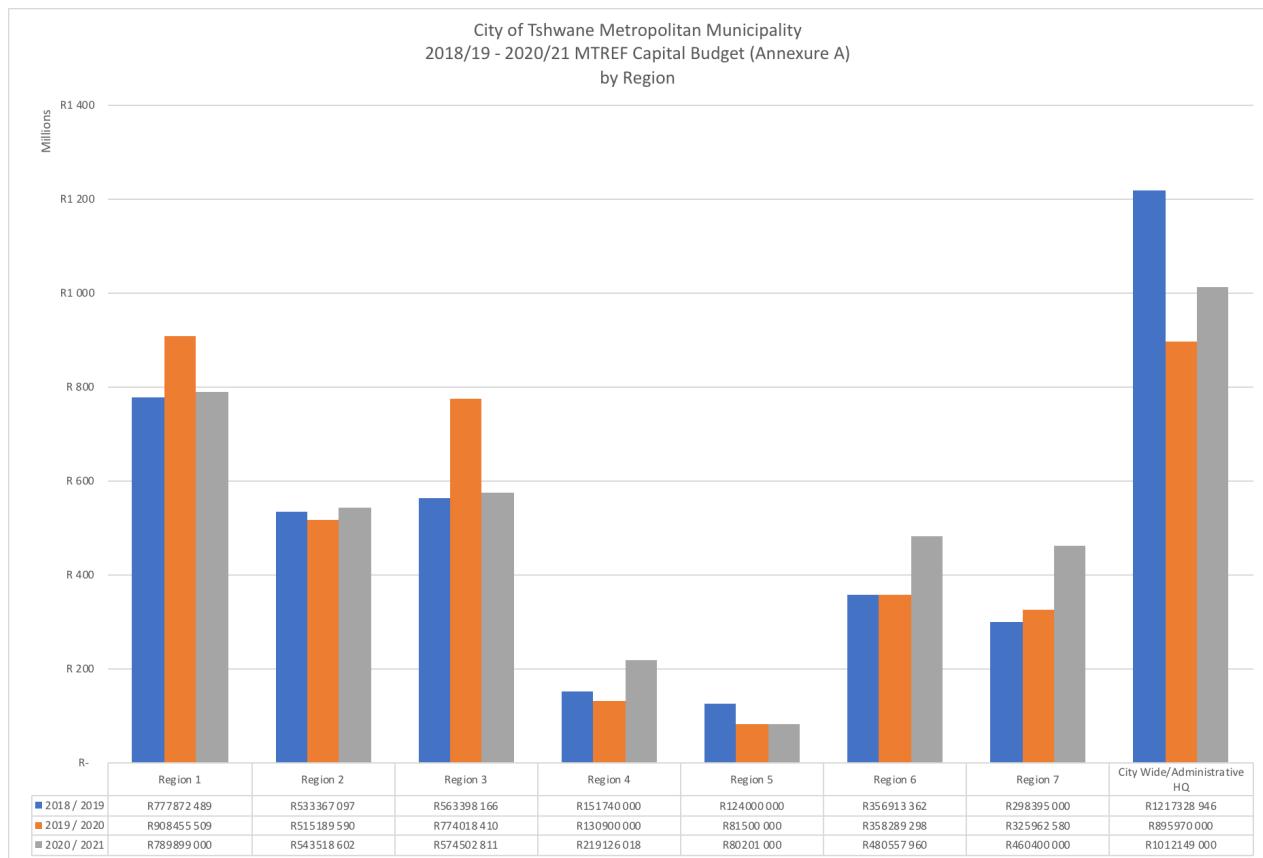


Figure D-31: 2018/19 MTREF Capital Budget (Annexure A) Regional Analysis

D.2.6.2 Value of Capital by Ward level

The 2018/19 MTREF Capital Budget (Annexure A) analysis indicates that Ward 96 requested R 204 million (5,1%) of the 2018/19 MTREF capital budget, whereas the remainder of the budget is distributed over the various wards (Refer to Table D-40). Ward 96, 102, 58, 90, and 55 are the top 5 wards in the 2018/2019 MTREF capital budget. In 2019/20 the highest demand of capital is in ward 58, with R 238 million (6%).

Table D-40: 2018/19 MTREF Capital Budget (Annexure A) by Ward level

Ward Number	2018 / 2019	%	2019 / 2020	%	2020 / 2021	%
Citywide/ Administrative HQ	R1 217 328 946	30,3%	R895 970 000	22,5%	R1 012 149 000	24,3%
Ward 102	R196 500 000	4,9%	R230 597 580	5,8%	R238 000 000	5,7%
Ward 58	R184 129 050	4,6%	R238 390 167	6,0%	R81 098 493	1,9%
Ward 96	R204 376 222	5,1%	R111 127 757	2,8%	R158 500 000	3,8%
Ward 55	R116 500 000	2,9%	R167 500 000	4,2%	R152 500 000	3,7%
Ward 25	R57 000 000	1,4%	R203 326 509	5,1%	R70 000 000	1,7%
Ward 90	R124 863 469	3,1%	R134 000 000	3,4%	R70 000 000	1,7%
Ward 46	R87 000 000	2,2%	R50 145 640	1,3%	R172 057 960	4,1%
Ward 32	R84 500 001	2,1%	R104 600 000	2,6%	R95 000 000	2,3%
Ward 49	R101 642 650	2,5%	R82 489 413	2,1%	R97 000 000	2,3%
Ward 105	R69 895 001	1,7%	R95 365 002	2,4%	R109 900 000	2,6%
Ward 98	R83 750 000	2,1%	R134 729 000	3,4%	R49 899 000	1,2%
Total Capital Budget	R4 023 015 064	100%	R3 990 285 392	100%	R4 160 354 392	100%

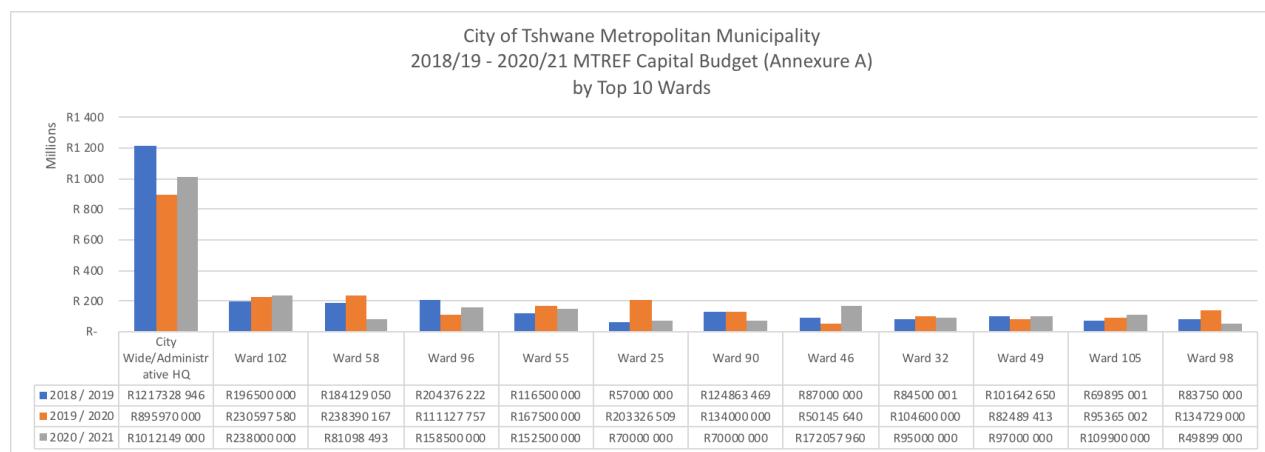


Figure D-32: 2018/19 MTREF Capital Budget (Annexure A) Top 10 Wards

D.2.6.3 Value of Capital Demand by Node Area

The MSDF nodes are defined as those underserved areas where high density of population resides and where significant infrastructure backlogs exist (refer to Figure D-33).

The MSDF node capital demand analysis was undertaken by means of the Tshwane Capital Planning system (CaPS), which allows for the spatial referencing of capital projects. The capital demand analysis of the 2018/19 MTREF Capital Budget (Annexure A) by MSDF node area is shown in Figure D-34.



Figure D-33: City of Tshwane MSDF Node Areas

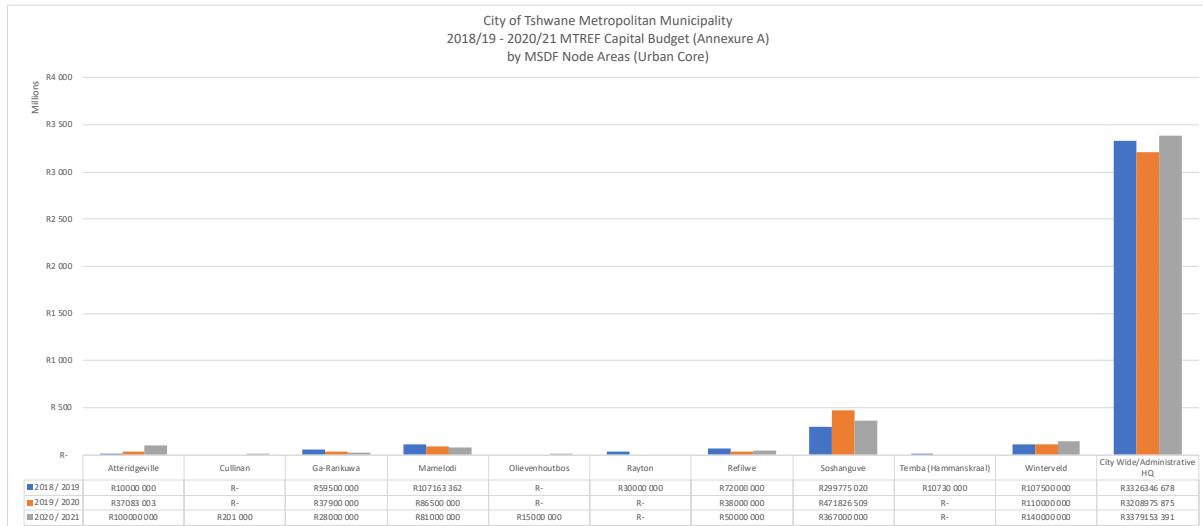


Figure D-34: 2018/19 MTREF Capital Budget (Annexure A) MSDF Node Area Analysis

The analysis indicates that approximately R629 million is requested in Node areas, which amounts to approximately 17% of the capital budget total. The comparative spending analysis of the 2018/19 MTREF capital budget by Node area indicates that most of the Node expenditure is allocated to Soshanguve at R299 million (43%) followed by Winterveld at R107 million (15%). Mamelodi requested the third highest at R107 million (15%) within the capital budget.

D.2.6.4 Value of Capital by Industrial Nodes

The MSDF industrial node capital demand analysis was undertaken by means of the Tshwane Capital Planning system (refer to Figure D-35), which allows for the spatial referencing of

capital projects. The capital demand analysis of the 2018/19 MTREF Capital Budget by MSDF industrial node area is shown in Figure D-35.

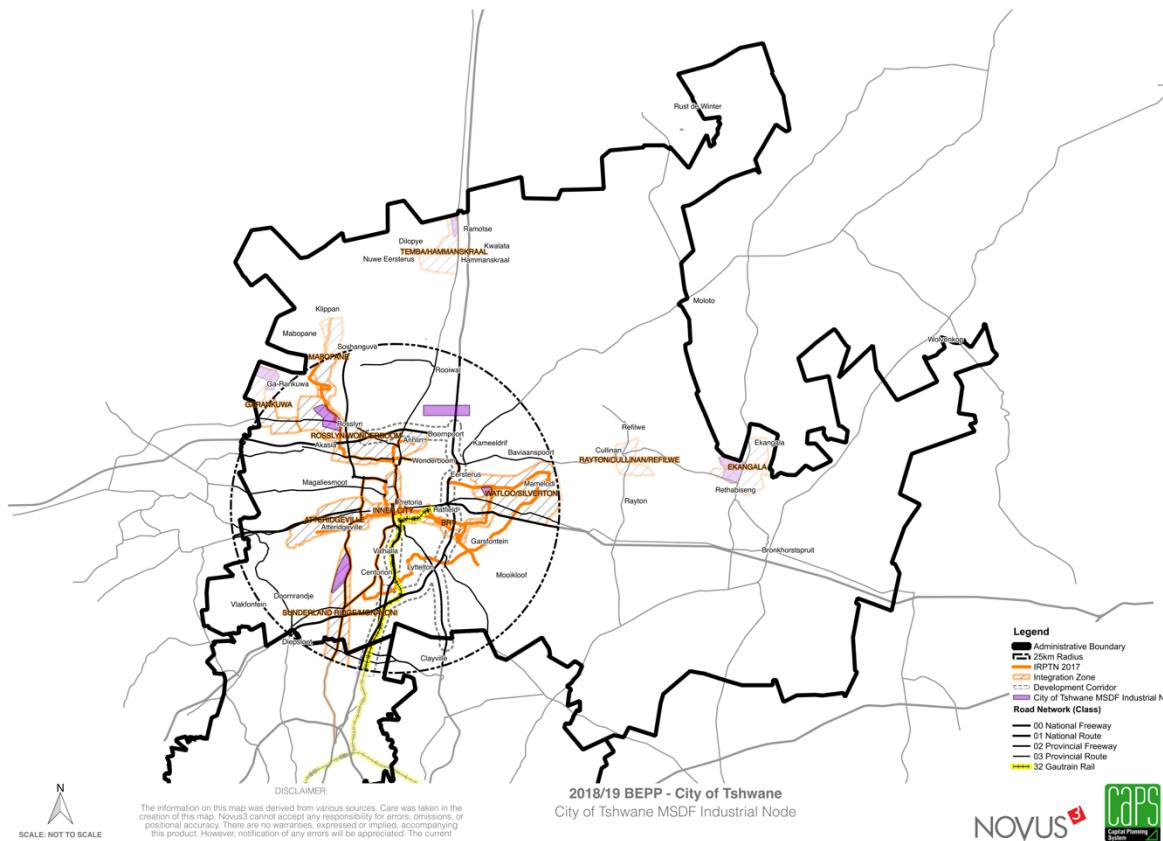


Figure D-35: City of Tshwane MSDF Industrial Nodes

The analysis indicates that R26 million (0,67%) of the capital budget is requested in Industrial nodes. The analysis of the 2018/19 MTREF capital budget by industrial node indicates that most of the industrial node expenditure is allocated to RosCon at R26 million (99%), followed by Sunderland Ridge at R240 thousand (1%).

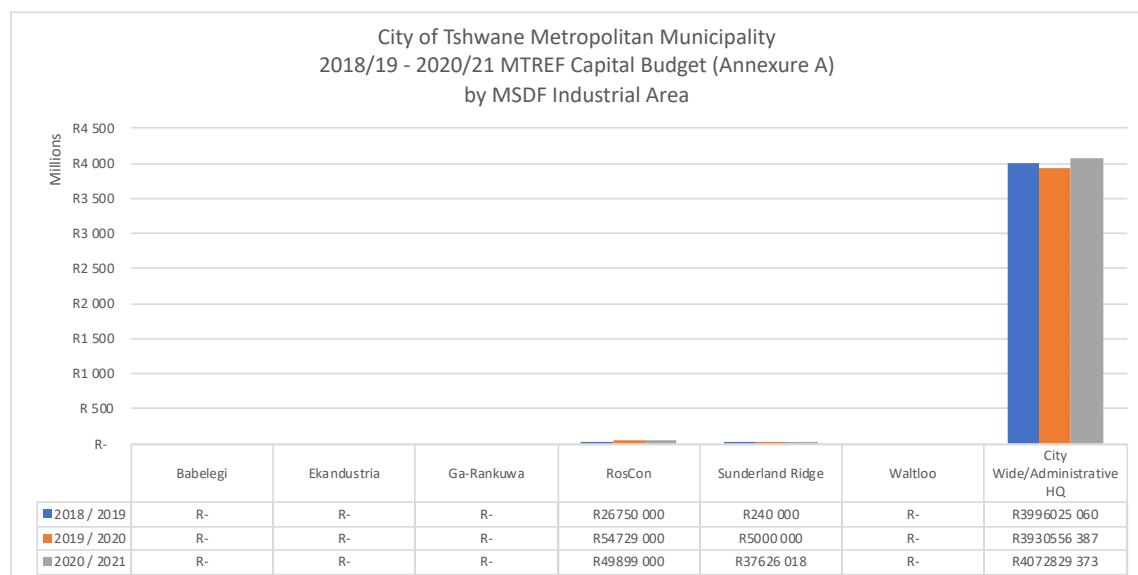


Figure D-36: 2018/19 MTREF Capital Budget (Annexure A) MSDF Industrial Node Analysis

D.2.6.5 Value of Capital in SDF Metropolitan Nodes

The MSDF metropolitan nodal capital analysis was undertaken by means of the Tshwane Capital Planning system (CaPS) (refer to Figure D-37), which allows for the spatial referencing of capital projects. The capital demand analysis of the 2018/19 MTREF Capital Budget by MSDF Capital Core (Primary Node) area is shown.

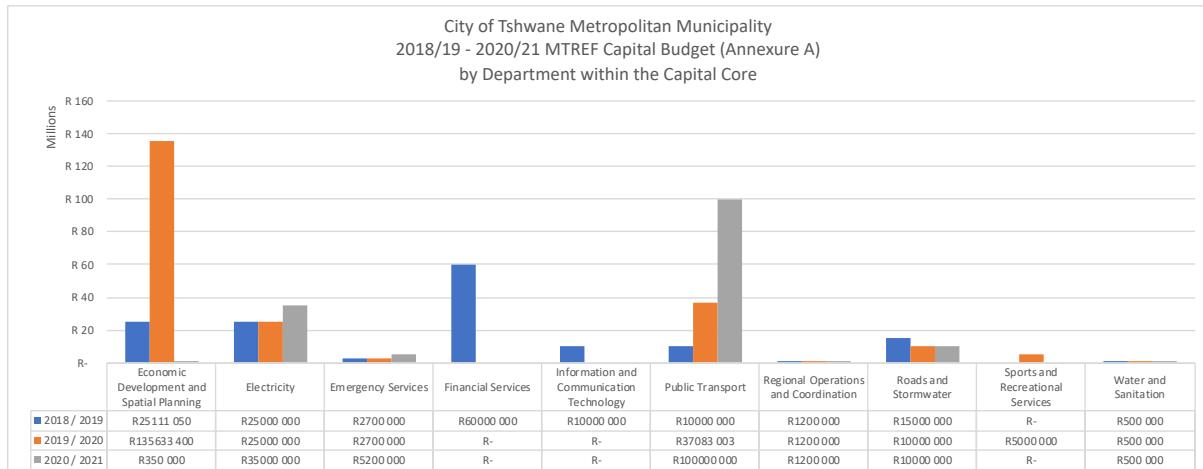


Figure D-38: 2018/19 MTREF Capital Budget (Annexure A) MSDF Capital Core Analysis

The capital demand analysis of the MSDF metropolitan nodes (excluding the Capital Core (CBD)), is shown in Figure D-39.

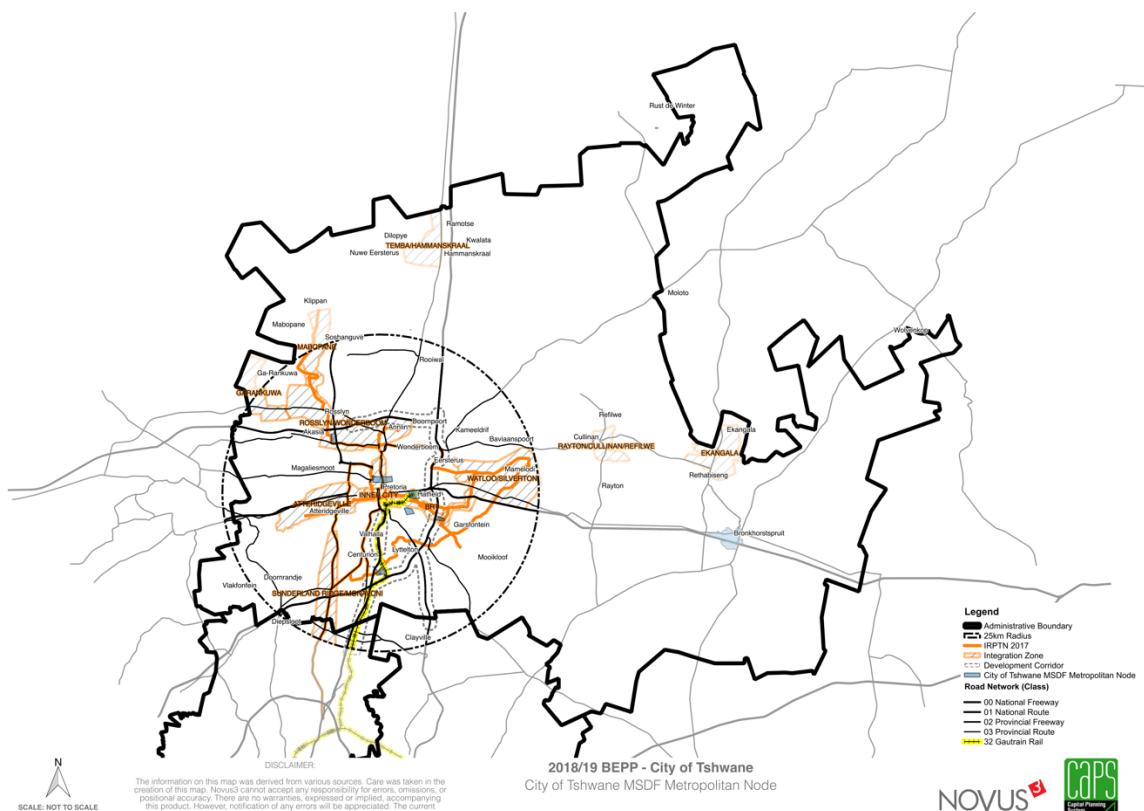


Figure D-37: City of Tshwane Metropolitan Nodes

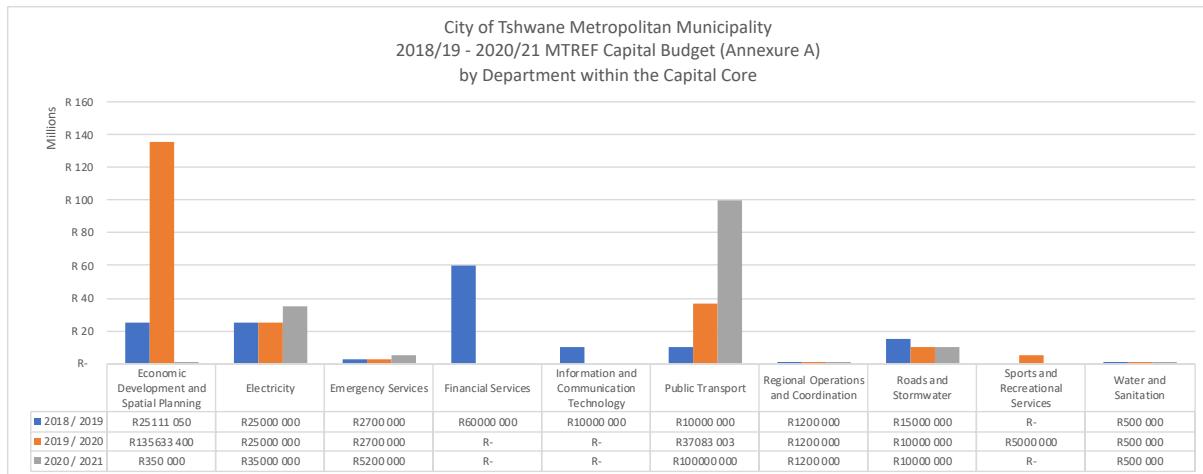


Figure D-38: 2018/19 MTREF Capital Budget (Annexure A) MSDF Capital Core Analysis

Capital budget within the capital core of Tshwane amounts to approximately R149 million in 2018/19 financial year, which equates to approximately 4% of the total 2018/19 capital budget. Capital core demand increases in 2019/20 to R217 million and then decreases to R152 million in 2020/21.

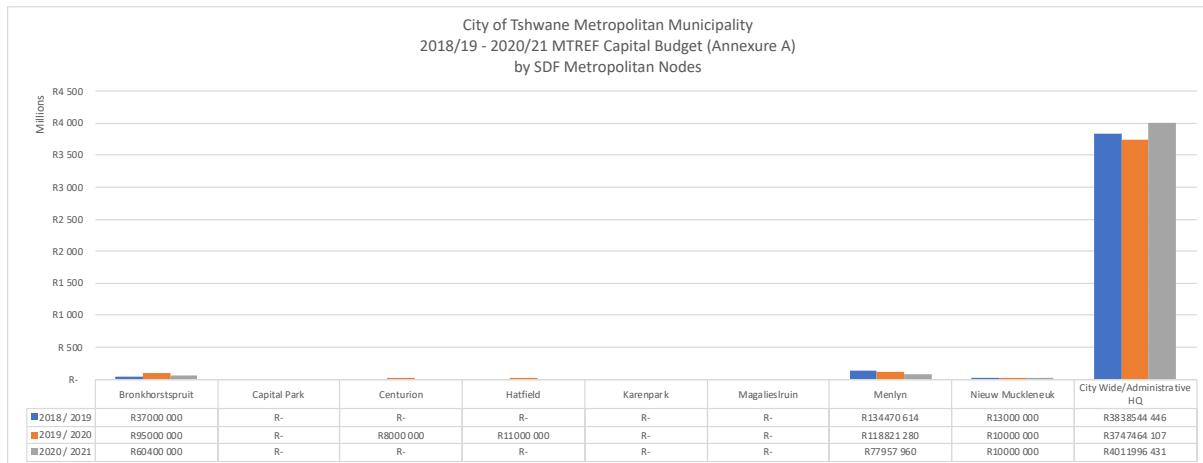


Figure D-39: 2018/19 MTREF Capital Budget (Annexure A) MSDF Metropolitan Node Analysis

With respect to MSDF Metropolitan nodes, a R184 million is requested in metropolitan nodes throughout the city during 2018/19, which amounts to 5% of the total capital. The highest nodal expenditure is the Menlyn Node at R134 million comprising of 73% of the total Metropolitan Nodes capital budget in the 2018/19 MTREF.

D.2.6.6 Value of Capital in the IRPTN Phase 1 Development Catchment

The implementation of the IRPTN network, as a spatial transformative urban element, serves to catalyse development through the increase of land-use intensity and development density within a 1500m walkable development catchment, thereby bringing about land-value capture in terms of a potential rates base increase for the municipality. This 1500m development catchment around the IRPTN Phase 1 has been defined and an IRPTN Phase 1 development catchment budget analysis was undertaken by means of the Tshwane Capital Planning

System (CAPS) (refer to Figure D-40). The capital budget analysis of the 2018/19 MTREF Capital Budget for the IRPTN 500m development catchment area is shown in Figure D-41.

From the analysis, it is evident that a significant amount of capital investment is occurring within the 1500m IRPTN Phase 1 Development Catchment area in support of the Tshwane Rapid Transit (TRT) system. For the 2018/19 financial year, approximately R722 million (18%) is requested in this corridor and including R770 million (19%) and R746 million (18%) in 2019/20 and 2020/21 financial years respectively.



Figure D-40: City of Tshwane IRPTN Phase 1 500m Development Catchment

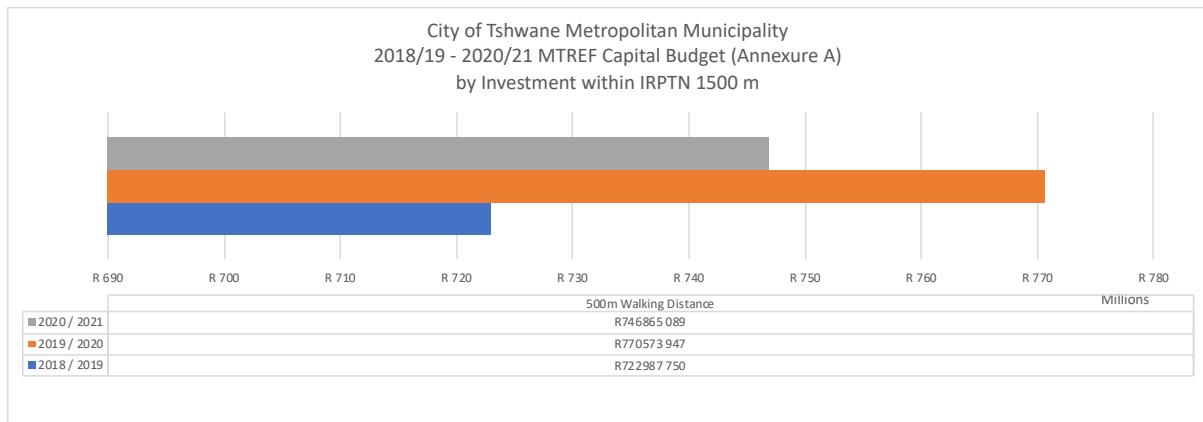


Figure D-41: 2018/19 MTREF Capital Budget (Annexure A) IRPTN 1500m Development Catchment Analysis

D.2.6.7 Value of Capital in the Pro-Poor Areas

Capital expenditure in pro-poor areas is critical to redress service infrastructure backlogs and to eliminate barriers to social and economic development in these areas. A deprivation analysis was undertaken for the City of Tshwane using the StatsSA Census 2011 data on household income, dwelling type, household size, service backlogs and levels of service of various infrastructure services. A composite deprivation index was developed from these indicators by using a weighted average level of deprivation for each measurement criteria. The weightings of the contributing measurement criteria in relation to the composite deprivation index is available on request. The deprivation index can be expressed spatially as a heat map, where warmer colours (red) indicate greater levels of deprivation, whereas cooler colours (yellow) indicate lower levels of deprivation (refer to Figure D-42). Pro-poor areas were identified using the deprivation index for the City of Tshwane, as areas where the relative level of deprivation exceeded 50% of the analysis zone. Pro-poor expenditure areas are shown in Figure D-43.

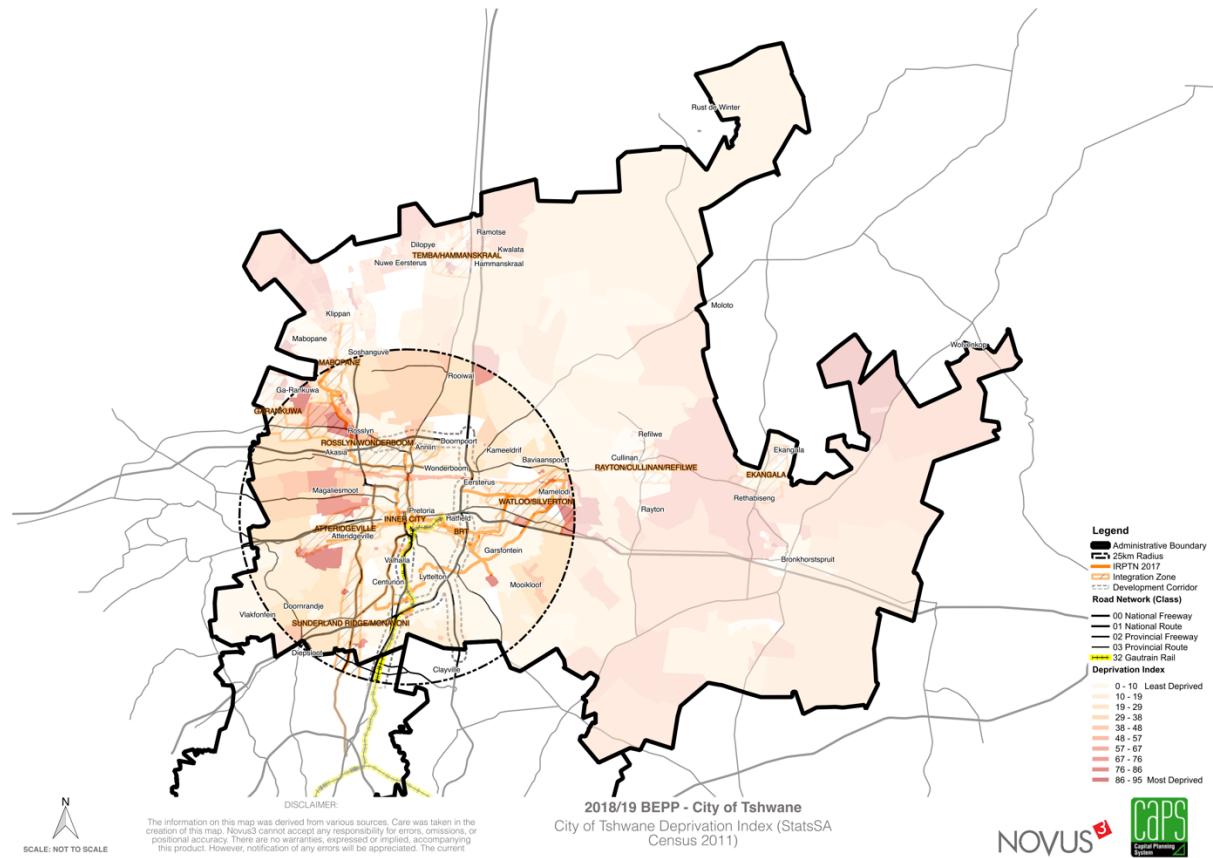


Figure D-42: City of Tshwane Deprivation Index (StatsSA Census 2011)

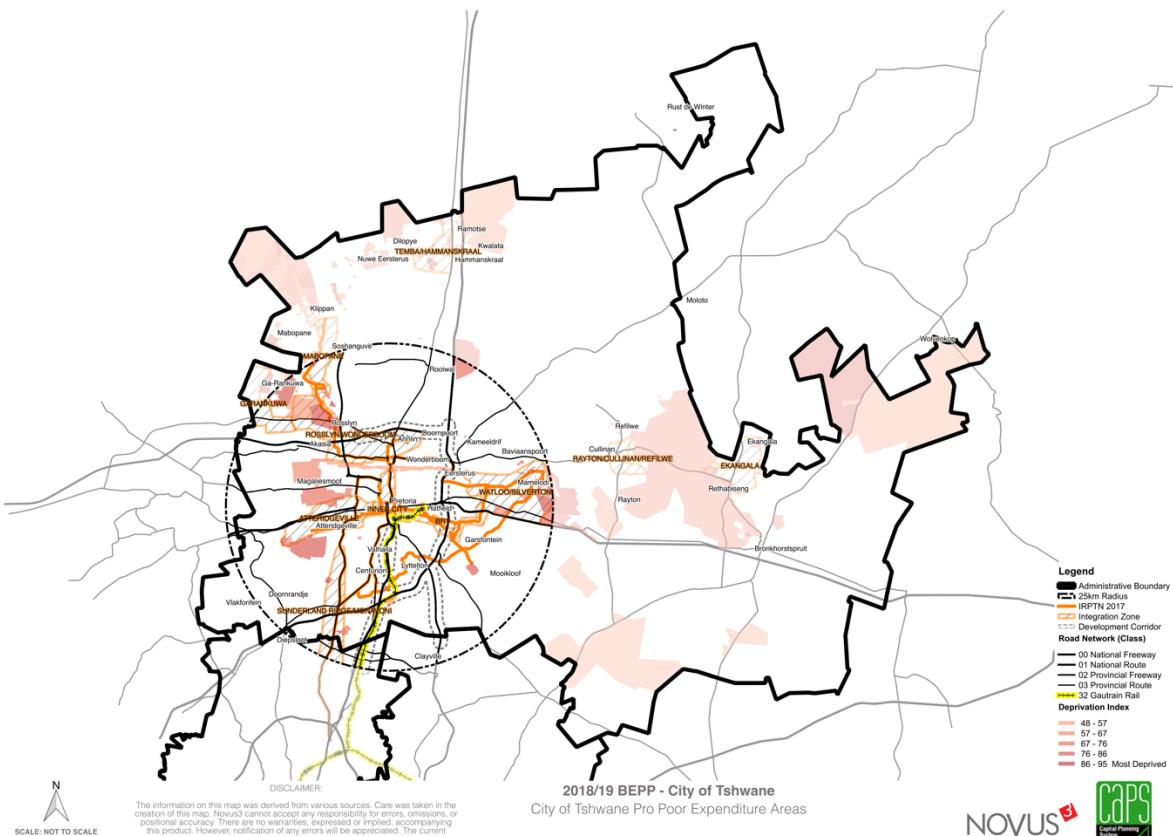


Figure D-43: City of Tshwane Pro-Poor Expenditure Areas

The analysis of the pro-poor areas, as a spatial transformative urban element, serves to redress backlogs and eliminate stumbling blocks to development. This pro-poor analysis was undertaken by means of the Tshwane Capital Planning System (CAPS). The capital budget analysis of the 2018/19 MTREF Capital Budget for the pro-poor areas is shown in Figure D-44 with the capital budget of each department within these areas.

With respect to Pro-poor areas, a R791 million is allocated to these areas during 2018/19, which amounts to 20% of the total capital budget. The department with the highest capital budget “expenditure” within these areas are Housing and Human Settlement followed by Utility Services and Roads and Transport, highlighting the focus of the city towards Basic Service delivery.

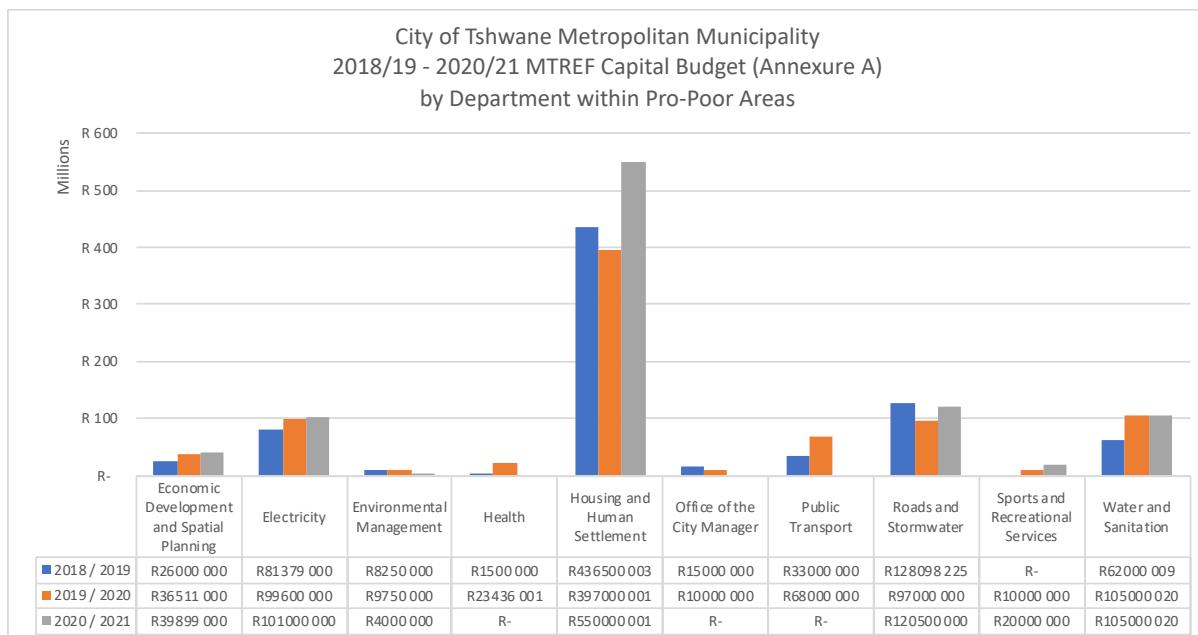


Figure D-44: 2018/19 MTREF Capital Budget (Annexure A) Pro-poor Area Analysis

D.2.6.8 Value of Capital Demand in Economic Development Priority Quadrant

During the Municipal Elections of 2016, the City of Tshwane came under new political leadership which was accompanied by refocussed strategies and objectives regarding the way in which the city will direct its expenditure. *The strategic planning areas as indicated in documents (i.e. MSDF, IDP etc.) of Tshwane will for the most, remain, for the simple reason that the realities of the City of Tshwane stay the same.* Impoverished areas are still where they are, and infrastructure backlog largely remains where they were during the submission of the 2016/17 capital budget. A strong focus on these realities will remain.

However, specific spatial strategic interventions have received attention by the new administration and a refocus on specific intervention areas identified in the MSDF were pronounced. These refocussed spatial priority intervention areas known as Priority Nodes & Corridors for Spatial Transformation are shown in Figure D-45. The 2018/19 BEPP Economic Development Priority Quadrant areas have been updated and includes the above mentioned Targeted Spatial Economic/Social Infrastructure Investment Areas, as outline in the Implementation of the outcomes of the Mayoral Strategic Planning Session Memorandum (1 December 2017).

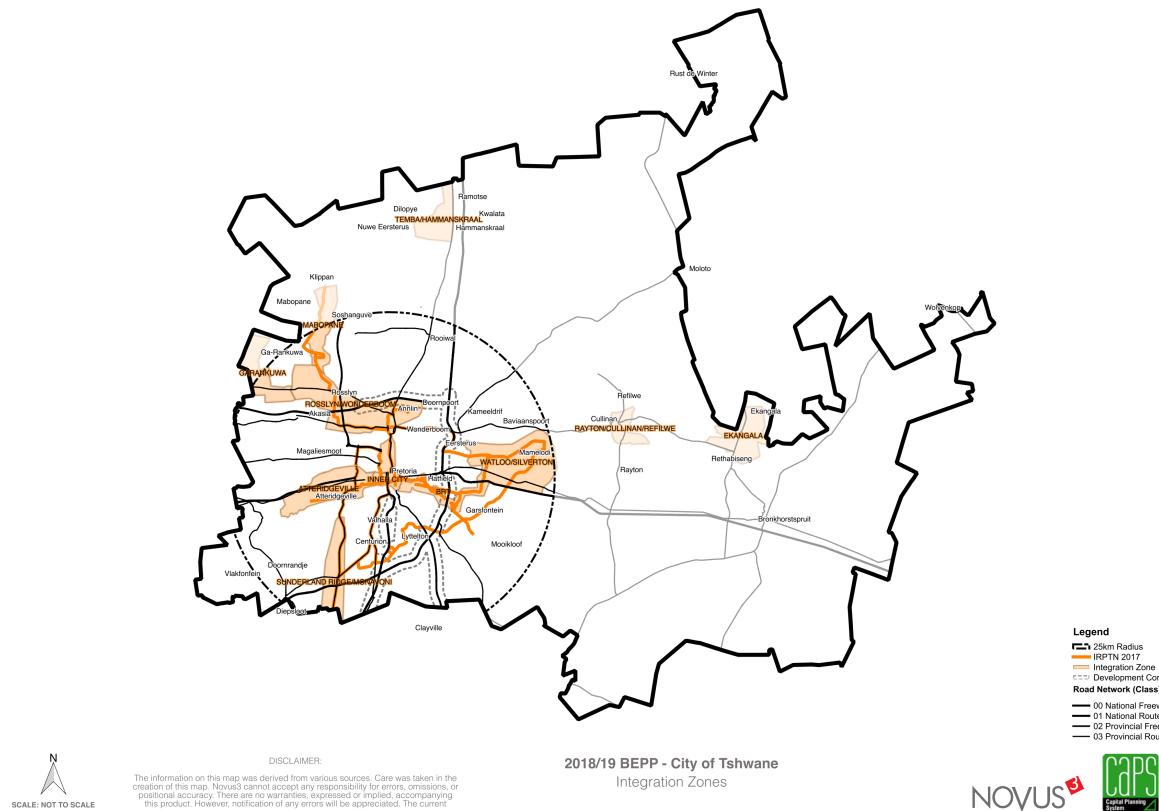


Figure D-45: 2018/19 BEPP Economic Development Priority Quadrants

The 2018/19 BEPP Economic Development Priority Quadrant areas capex analysis was undertaken by means of the Tshwane Capital Planning system (CaPS), which allows for the spatial referencing of capital projects. The 2018/19 capital budget analysis is shown in Figure D-46.

2018/19 MTREF Capital budget within the 2018/19 BEPP Economic Development Priority Quadrant areas of Tshwane amounts to approximately R925 million in the 2018/19 financial year, which equates to approximately 23% of the total 2018/19 capital budget demand, capital expenditure increases in 2019/20 to R959 million (24%) and then decreases to R773 million in 2020/21 (19%).

In terms of specific Economic Development Priority Quadrant areas, expenditure occur based on the following areas:

- Watloo/Silverton accounts for 26% of the total capex expenditure earmarked within the BEPP Economic Development Priority Quadrant areas.
- Rosslyn/Wonderboom accounts for 28% of the total capex expenditure earmarked within the BEPP Economic Development Priority Quadrant areas.
- Inner city (Capital Core) accounts for 20% of the total capex expenditure earmarked within the BEPP Economic Development Priority Quadrant areas.
- Integration Zone accounts for 26% of the total capex expenditure earmarked within the BEPP Economic Development Priority Quadrant areas.

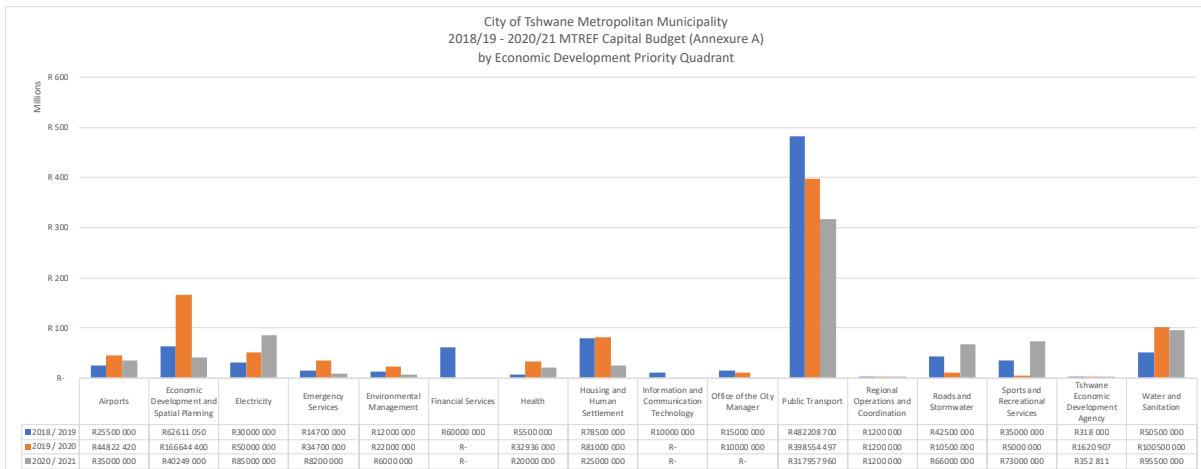


Figure D-46: 2018/19 MTREF Capital Budget (Annexure A) 2018/19 BEPP Economic Development Priority Quadrant areas.

D.2.7 2018/19 MTREF Capital Budget (Annexure A) Asset Management

This table brings together the core financial elements of asset management and summarises the capital programme in terms of new assets and the renewal of existing assets. The objective is to provide a complete picture of the municipality's asset management strategy, indicating the resources being deployed for maintaining and renewing existing assets, as well as the extent of asset expansion.

Works Type	2018 / 2019	%	2019 / 2020	%	2020 / 2021	%
Existing	R1 021 836 831	25,40%	R1 242 937 300	31,15%	R1 607 285 260	38,63%
Renewal	R550 123 469	13,67%	R703 517 420	17,63%	R971 723 982	23,36%
Upgrading	R471 713 362	11,73%	R539 419 880	13,52%	R635 561 278	15,28%
Land	R13 895 000	0,35%	R25 365 000	0,64%	R0	0,00%
New	R2 987 283 229	74,25%	R2 721 983 087	68,22%	R2 553 069 131	61,37%
Grand Total	R4 023 015 060	100,00%	R3 990 285 387	100,00%	R4 160 354 391	100,00%

Table D-41: 2018/19 MTREF Capital Budget (Annexure A) MSCOA Action Classifications

In terms of MFMA Circulars 55 and 66 at least 40% of the Capital Budget must be allocated towards renewal of existing assets. From the above table, it is evident that only approximately 25% of the budget has been allocated for the renewal of existing assets in the 2018/19 and approximately 31% of the budget has been allocated to renewal of existing assets in 2019/20 financial year.

D.3 Institutional Arrangements

In order to set out the principles of leadership, good governance and planning, and strategy led budgeting employed in the City of Tshwane, reference needs to be made to Figure D-1 included at the start of section D.

Various processes lead up to the finalising of the capital budget which in turn, is integrated with the operational budget and analysed for optimal resourcing.

During the processes for compilation of the capital budget, strategic objectives are included and considered in the prioritisation model and prioritisation process. This is an intricate and scientifically supported process and as such, renders highly dependable results in ensuring

alignment between the capital budget and the strategic objectives of the City of Tshwane. Please refer to section B2: Planning for priority, for a detailed description of the methodology followed in the different parts of the prioritisation process.

The budget fit process provides a further opportunity for inclusion/exclusion of particular projects based on their strategic value.

The integrated budget simulation process as set out at the start of section D further supports strategic planning and alignment as well as testing thereof, by analysing various policy and other scenario analyses. It can also be applied prior to the budget fit process in order to assist in determining the optimal budget amounts to be fitted to, given the City's access to each of the three broad types of funding sources.

The implementation of the full process outlined above and throughout the rest of the BEPP, is at various levels of maturity.

The City of Tshwane has been utilising the outputs from all the tools indicated in Figure D-1, except for the Budget Impact Simulator. A phased approach has been taken with regard to its implementation as described in section D.1. According to this approach, phase one has been completed and as part of phase two, the City of Tshwane would need to decide whether it will be implementing the use of the Budget Impact Simulator in its processes.

Furthermore, alignment between the CaPS process and the City of Tshwane's current processes is still ongoing.



ADDENDUM A

Table 1: Full cash flow forecast of the status quo position

Cash flow forecast - status quo							
	Previous year (audited)	Previous year (unaudited)	Current year	MTREF			Longer Term Financial Plan
	2016	2017	2018	2019	2020	2021	2022
Income line items							
Equitable Share Allocation	1 654 389 319	1 864 839 007	2 132 788 000	2 404 666 000	2 661 272 000	2 927 399 200	3 220 139 120
Property Rates	5 689 183 607	6 274 132 775	7 068 461 255	7 563 121 584	8 092 935 578	8 659 844 364	9 266 033 470
Approved capital projects: Property Rates	-	-	-	-	-	-	-
Property Rates - Penalties And Collection Charges	-	-	-	-	-	-	-
Service Charges - Total	17 489 717 254	19 219 004 933	21 040 505 143	22 458 995 908	23 953 205 306	25 498 841 813	27 144 976 090
Service Charges - Electricity	9 700 243 075	11 718 191 279	12 220 411 123	12 971 121 324	13 754 620 414	14 579 897 639	15 454 691 497
Approved capital projects: Service Charges - Electricity	-	-	-	-	-	-	-
Service Charges - Water	4 815 847 744	4 716 453 003	5 286 075 886	5 654 663 519	6 042 408 153	6 465 376 724	6 917 953 094
Approved capital projects: Service Charges - Water	-	-	-	-	-	-	-
Service Charges - Sanitation	822 906 063	938 020 763	1 255 927 589	1 341 897 389	1 432 254 454	1 525 350 993	1 624 498 808
Approved capital projects: Service Charges - Sanitation	-	-	-	-	-	-	-
Service Charges - Refuse	1 919 342 012	1 531 336 506	2 278 090 546	2 491 313 676	2 723 922 285	2 928 216 457	3 147 832 691
Approved capital projects: Service Charges - Refuse	-	-	-	-	-	-	-
Service Charges - Other	231 378 360	315 003 382	-	-	-	-	-
Approved capital projects: Service Charges - Other	-	-	-	-	-	-	-
Rental of facilities and equipment	131 980 491	128 862 904	151 864 331	166 870 101	182 865 847	192 009 139	201 609 596
Approved capital projects: Rental of facilities and equipment	-	-	-	-	-	-	-
Interest earned - Investments	55 999 525	105 227 293	79 492 589	74 608 912	79 433 982	82 611 341	82 611 341
Interest earned - outstanding receivables	361 021 944	553 456 804	466 690 860	380 169 069	398 996 043	414 955 885	431 554 120
Dividends received	-	-	-	-	-	-	-
Fines, penalties and forfeits	313 548 835	201 694 980	332 854 283	349 555 126	368 570 200	386 998 710	406 348 646
Licenses and Permits	48 743 171	49 266 169	54 796 089	58 484 124	61 759 340	64 847 307	68 089 672
Approved capital projects: Licenses and Permits	-	-	-	-	-	-	-
Agency services	-	-	1	6 650 000	22 994 000	37 440 000	37 440 000
Approved capital projects: Agency services	-	-	-	-	-	-	-
Other Revenue	1 014 934 262	1 149 449 658	887 079 295	924 703 745	977 066 547	1 025 919 874	1 056 697 471
Approved capital projects: Other Revenue	-	-	-	-	-	-	-
Gain on disposal of PPE	62 468 328	-	5 880 214	1 242 497	1 312 100	-	-
Revenue foregone	-3 131 305 288	-3 281 644 095	-4 027 792 447	-4 462 639 486	-4 933 178 241	-5 278 500 718	-5 647 995 768
Approved capital projects: Revenue foregone	-	-	-	-	-	-	-
Operating income from current activities	23 690 681 448	26 264 290 429	28 199 269 612	29 942 771 580	31 881 678 703	34 012 366 916	36 267 503 758
Operating income from approved capital projects	-	-	-	-	-	-	-
Total operating income (excluding conditional operating and capital grants)	23 690 681 448	26 264 290 429	28 199 269 612	29 942 771 580	31 881 678 703	34 012 366 916	36 267 503 758
Expense line items							
Employee expenses - Wages & Salaries	-4 555 121 163	-4 950 954 887	-5 284 882 100	-5 713 191 155	-6 098 981 625	-6 464 920 522	-6 852 815 754
Approved capital projects: Employee expenses - Wages & Salaries	-	-	-	-	-	-	-
Employee expenses - Social Contributions	-2 842 687 704	-2 944 872 135	-3 493 889 645	-3 726 116 114	-3 973 220 796	-4 211 614 044	-4 464 310 886
Approved capital projects: Employee expenses - Social Contributions	-	-	-	-	-	-	-
Councillor remuneration	-112 443 327	-118 003 200	-125 280 507	-132 672 056	-140 102 000	-147 107 100	-154 462 455
Debt impairment	-505 650 500	-637 816 347	-1 179 972 918	-1 269 943 153	-1 344 920 734	-1 430 697 677	-1 522 144 307
Debt impairment - Long-term receivables	-32 706 325	-1 440 924	-10 040 435	-10 842 753	-11 482 809	-11 942 225	-12 419 914
Debt impairment - Other receivables	-316 859 538	-286 269 472	-233 839 185	-252 524 924	-267 434 023	-278 131 384	-289 256 640
Debt impairment - Consumer receivables: rates	-38 738 620	-194 046 618	-239 558 330	-258 701 077	-273 974 817	-293 153 054	-313 673 767
Debt impairment - Consumer receivables: electricity	-28 173 542	-14 004 238	-14 887 614	-16 767 722	-170 259 465	-182 177 628	-194 330 062
Debt impairment - Consumer receivables: water	-3 521 693	-10 503 179	-29 043 801	-31 643 011	-32 160 528	-355 411 765	-380 290 588
Debt impairment - Consumer receivables: sewerage	-8 804 232	-17 505 298	-41 119 143	-44 404 910	-47 026 581	-50 318 442	-53 840 732
Debt impairment - Consumer receivables: refuse	-68 673 009	-73 522 250	-67 650 930	-73 056 815	-77 370 097	-82 786 004	-88 581 024
Debt impairment - Consumer receivables: other	-	-	-1	-144 458 482	-156 001 943	-165 212 314	-176 777 177
Collection costs	-171 241 549	-98 993 624	-	-	-	-	-
Depreciation & Asset Impairment	-1 464 000 030	-1 620 077 635	-1 961 301 772	-2 106 141 142	-2 225 084 144	-2 336 338 351	-2 453 155 269
Approved capital projects: Depreciation & Asset Impairment	-	-	-	-	-	-	-
Interest paid on external debt	-1 061 586 522	-1 205 642 506	-1 331 590 145	-1 232 807 582	-1 175 139 267	-1 125 634 144	-1 084 349 155
Bulk Purchases	-8 808 848 636	-9 582 375 815	-10 380 763 782	-11 029 714 744	-11 697 485 008	-12 199 166 356	-12 775 263 771
Bulk Purchases - Electricity	-6 890 347 008	-7 597 154 111	-7 462 684 400	-7 902 982 800	-8 361 355 800	-8 863 037 148	-9 439 134 563
Approved capital projects: Bulk Purchases - Electricity	-	-	-	-	-	-	-
Bulk Purchases - Water	-1 918 501 628	-1 985 221 704	-2 918 079 382	-3 126 731 944	-3 336 129 208	-3 336 129 208	-3 336 129 208
Approved capital projects: Bulk Purchases - Water	-	-	-	-	-	-	-
Contracted services	-2 466 462 048	-2 248 691 575	-2 053 908 471	-2 032 899 436	-2 229 311 288	-2 363 069 965	-2 504 854 163
Approved capital projects: Contracted services	-	-	-	-	-	-	-
Grants and subsidies paid	-347 060 760	-381 061 824	-49 980 234	-53 438 449	-56 523 218	-59 914 611	-63 509 487
Repairs and maintenance	-1 428 498 977	-1 061 466 367	-1 197 928 720	-1 366 099 673	-1 526 761 535	-1 633 634 843	-1 747 989 282
Approved capital projects: Repairs and maintenance	-	-	-	-	-	-	-
General expenses	-1 617 017 773	-2 567 778 468	-2 853 563 606	-3 075 258 557	-3 249 921 985	-3 444 917 304	-3 651 612 343
Approved capital projects: General expenses	-	-	-	-	-	-	-
Loss on disposal of PPE	-	-64 865 196	1 062	1 125	1 200	1 272	1 348
Contributions to 'other' provisions	-64 122 583	-75 963 758	-	-	-	-	-
Operating expenditure from current activities	-25 444 741 571	-27 558 563 336	-29 909 060 837	-31 738 280 935	-33 717 450 400	-35 417 013 646	-37 274 465 523
Operating expenditure from approved capital projects	-	-	-	-60 573 933	-21 923 727	-382 385 132	-1 383 429 424
Total operating expenditure (excluding conditional operating and capital grants)	-25 444 741 571	-27 558 563 336	-29 909 060 837	-31 798 854 688	-33 937 374 127	-35 799 398 778	-38 657 894 947
Accounting Operating Surplus/(Deficit) (excl conditional operating and capital grants)	-1 754 060 123	-1 294 272 907	-1 709 791 226	-1 856 083 288	-2 055 695 425	-1 787 031 862	-2 390 391 189
Finance income/expenditure adjustments: external Finance Charges & Investment Income	1 005 586 997	1 100 415 213	1 252 097 556	1 158 198 669	1 095 705 285	1 043 022 802	1 001 737 814
Non-cash adjustments: Depreciation, Debt Impairment & Contribution to other Provisions	2 033 773 113	2 333 857 740	3 137 274 690	3 436 658 228	3 789 928 605	4 149 421 161	5 358 729 000
Cash Operating Surplus/(Deficit) before working capital adjustments	1 285 299 987	2 140 000 046	2 679 581 020	2 738 773 610	2 829 938 465	3 405 412 101	3 970 075 624
Consumer Debtors - change	-4 297 946 637	-1 125 707 280	461 071 492	-456 462 661	-478 878 255	-753 689 999	-583 739 606
Other Debtors - change	130 086 011	-61 483 514	94 946 103	-52 360 265	-50 580 016	-358 921 807	-97 289 934
Current Portion Of Long-Term Receivables - change	6 916 134	4 244 262	-72 343 908	-13 303 866	-13 996 134	37 712 122	-9 728 993
Change in Current Assets (Excluding Inventory & Cash)	-4 160 944 492	-1 182 946 532	483 673 685	-522 126 792	-543 454 405	-1 074 899 685	-690 758 534
Consumer Deposits - change	24 689 856	31 387 379	-11 581 640	7915 106	8 073 408	9 161 687	26 547 405
Provisions - change	-	-	-	-	-	-	-
Creditors - change	2 281 462 316	533 128 314	-1 559 485 766	96 465 616	98 549 859	1 543 575 176	485 711 005
Conditional Grants and Receipts - change	40 074 460	130 622 635	-23 712 072	2 123 485	1 403 452	-	-
Change in Current Liabilities	2 266 077 712	695 148 328	-1 808 188 378	102 257 236	108 026 719	1 552 736 863	512 258 409
Change in Inventory	-91 443 913	-115 104 753	-9 599 492	-69 849 408	-76 834 349	111 080 223	-46 699 168
Change in non-cash/non-standard items (only historic amounts)	1 459 430 557	-826 143 763	-1	-	-	-	-
Working capital adjustments	-526 880 136	-1 429 046 720	-1 334 114 184	-489 718 963	-512 262 034	588 917 402	-225 199 293
Total adjustments	2 512 479 974	2 005 226 233	3 055 258 061	4 105 137 934	4 373 371 856	5 781 361 365	6 135 267 520
Net Cash operating surplus/(deficit)	758 419 851	710 953 326	1 345 466 835	2 249 054 646	2 317 676 431	3 994 329 503	3 744 876 331

	Previous year (audited)	Previous year (unaudited)	Current year	MTREF			Longer Term Financial Plan
	2016	2017	2018	2019	2020	2021	2022
Debt service							
Interest earned - Investments	55 999 525	105 227 293	79 492 589	74 608 912	79 433 982	82 611 341	82 611 341
Interest paid on external debt	-1 061 586 523	-1 205 642 506	-1 331 590 145	-1 232 807 582	-1 175 139 267	-1 125 634 144	-1 084 349 155
Debt repayment - capital	-687 294 188	-732 530 217	-734 692 170	-788 400 914	-906 999 192	-1 016 608 913	-1 110 678 423
Net Interest and Debt Funding	-1 692 881 185	-1 832 945 430	-1 986 789 726	-1 946 599 583	-2 002 704 477	-2 059 631 715	-2 112 416 236
Conditional operational grant funding							
Conditional operational grants received (excl Equitable Share allocation)	1 862 436 859	1 948 305 797	2 026 743 871	2 021 229 490	2 086 203 290	2 167 409 083	2 297 453 628
Operational projects							
Maintenance projects	-	-	-	-	-	-	-
Municipal running cost projects	-	-	-	-	-	-	-
Operational projects (typical work streams)	-	-	-	-	-	-	-
Projects on behalf of Local Municipality/Provincial/National Government	-	-	-	-	-	-	-
Operational project expenditure	-	-	-	-	-	-	-
Bank overdraft utilised	-	-	-	-	-	-	-
Cash surplus/(deficit) after operational projects	927 975 525	826 313 693	1 385 420 980	2 323 684 553	2 401 175 244	4 102 106 871	3 929 913 724
Capital projects and grant funding							
Conditional capital grants received	2 452 210 170	2 355 387 259	2 449 910 336	2 168 935 510	2 301 280 710	2 554 501 580	2 707 771 675
Capital expenditure - new	-3 968 594 186	-3 232 827 753	-2 744 917 366	-2 983 765 579	-2 734 359 087	-3 246 289 164	-3 541 253 523
Capital expenditure - replacement	-	-	.996 474 322	-1 039 249 481	-1 255 926 300	-1 772 309 922	-2 056 208 517
Capital expenditure - repairs and maintenance	-	-	-	-	-	-	-
Capital expenditure	-3 968 594 186	-3 232 827 753	-3 741 391 688	-4 023 015 060	-3 990 285 387	-5 024 599 086	-5 597 462 040
New debt	1 200 000 000	1 000 000 000	-	-	-	-	-
Bank Overdraft - opening balance	-	-	-	-	-	-	-
Bank Overdraft - closing balance	-	-	-	-	-	-	-
Net cash surplus/(deficit)	611 591 509	948 873 199	93 939 628	469 605 003	712 170 567	1 632 009 365	1 040 223 358
	Previous year (audited)	Previous year (unaudited)	Current year	MTREF			Longer Term Financial Plan
	2016	2017	2018	2019	2020	2021	2022
Line items							
Call Investment Deposits	493 261 328	1 087 430 061	-	-	-	-	-
Cash	57 158 390	74 581 166	-	-	-	-	-
Cash and investments (excl overdraft) - opening balance	550 419 718	1 162 011 227	2 110 884 426	2 204 824 054	2 674 429 057	3 386 599 624	5 018 608 989
Net cash surplus/(deficit)	611 591 509	948 873 199	93 939 628	469 605 003	712 170 567	1 632 009 365	1 040 223 358
Call Investment Deposits	1 087 430 061	1 712 108 929	-	-	-	-	-
Cash	74 581 166	398 775 497	-	-	-	-	-
Cash and investments (excl overdraft) - closing balance	1 162 011 227	2 110 884 426	2 204 824 054	2 674 429 057	3 386 599 624	5 018 608 989	6 058 832 347

Table 2: Full cash flow forecast of the new debt position

Income line items	Previous year (audited)	Previous year (unaudited)	Current year	MTREF			Longer Term Financial Plan	
	2016	2017	2018	2019	2020	2021	2022	
Equitable Share Allocation	1 654 389 319	1 864 839 007	2 132 788 000	2 404 666 000	2 661 272 000	2 927 399 200	3 220 139 120	
Property Rates	5 689 183 607	6 274 132 775	7 068 461 255	7 563 121 584	8 092 935 578	8 659 844 364	9 266 033 470	
Approved capital projects: Property Rates								
Property Rates - Penalties And Collection Charges	-	-	-	-	-	-	-	-
Service Charges - Total	17 489 717 254	19 219 004 933	21 040 505 143	22 458 995 908	23 953 205 306	25 498 841 813	27 144 976 090	
Service Charges - Electricity	9 700 243 075	11 718 191 279	12 220 411 123	12 971 121 324	13 754 620 414	14 579 897 639	15 454 691 497	
Service Charges - Water	4 815 247 744	4 716 453 003	5 286 075 886	5 654 663 319	6 042 408 153	6 465 376 724	6 917 953 094	
Service Charges - Sanitation	822 906 063	938 020 763	1 255 927 589	1 341 897 389	1 432 254 454	1 525 350 993	1 624 498 808	
Approved capital projects: Service Charges - Sanitation	-	-	-	-	-	-	-	-
Service Charges - Refuse	1 919 342 012	1 531 336 506	2 278 090 546	2 491 313 676	2 723 922 285	2 928 216 457	3 147 832 691	
Approved capital projects: Service Charges - Refuse	-	-	-	-	-	-	-	-
Service Charges - Other	231 378 360	315 003 382	-	-	-	-	-	-
Approved capital projects: Service Charges - Other	-	-	-	-	-	-	-	-
Rental of facilities and equipment	131 980 491	128 862 904	151 864 331	166 870 101	182 865 847	192 009 139	201 609 596	
Approved capital projects: Rental of facilities and equipment	-	-	-	-	-	-	-	-
Interest earned - Investments	55 999 525	105 227 293	79 492 589	74 608 912	79 433 982	82 611 341	82 611 341	
Interest earned - outstanding receivables	361 021 944	553 456 804	466 690 860	380 169 069	398 996 043	414 955 885	431 554 120	
Dividends received	-	-	-	-	-	-	-	-
Fines, penalties and forfeits	313 548 835	201 694 980	332 854 283	349 555 126	368 570 200	386 998 710	406 348 646	
Licenses and Permits	48 743 171	49 266 169	54 796 089	58 484 124	61 759 340	64 847 307	68 089 672	
Approved capital projects: Licenses and Permits	-	-	-	-	-	-	-	-
Agency services	-	-	1	6 650 000	22 994 000	37 440 000	37 440 000	
Approved capital projects: Agency services	-	-	-	-	-	-	-	-
Other Revenue	1 014 934 262	1 149 449 658	887 079 295	924 703 745	977 066 547	1 025 919 874	1 056 697 471	
Approved capital projects: Other Revenue	-	-	-	-	-	-	-	-
Gain on disposal of PPE	62 468 328	-	5 880 214	1 242 497	1 312 100	-	-	
Revenue foregone	-3 131 305 288	-3 281 644 095	-4 027 792 447	-4 462 639 486	-4 933 178 241	-5 278 500 718	-5 647 995 768	
Approved capital projects: Revenue foregone	-	-	-	-	-	-	-	-
<i>Operating income from current activities</i>	23 690 681 448	26 264 290 429	28 199 269 612	29 942 771 580	31 881 678 703	34 012 366 916	36 267 503 758	
<i>Operating income from approved capital projects</i>	-	-	-	-	-	-	-	-
Total operating income (excluding conditional operating and capital grants)	23 690 681 448	26 264 290 429	28 199 269 612	29 942 771 580	31 881 678 703	34 012 366 916	36 267 503 758	
Expense line items								
Employee expenses - Wages & Salaries	-4 555 121 163	-4 950 954 887	-5 284 882 100	-5 713 191 155	-6 098 981 625	-6 464 920 522	-6 852 815 754	
Approved capital projects: Employee expenses - Wages & Salaries	-	-	-	-	-	-	-	-
Employee expenses - Social Contributions	-2 842 687 704	-2 944 872 135	-3 493 889 645	-3 726 116 114	-3 973 220 796	-4 211 614 044	-4 464 310 886	
Approved capital projects: Employee expenses - Social Contributions	-	-	-	-	-	-	-	-
Councillor remuneration	-112 443 327	-118 003 200	-125 280 507	-132 672 056	-140 102 000	-147 107 100	-154 462 455	
Debt impairment	-505 650 500	-637 816 347	-1 175 972 918	-1 269 943 513	-1 344 920 734	-1 430 697 677	-1 522 144 307	
Debt impairment - Long-term receivables	-12 706 325	-1 440 924	-10 040 435	-10 842 751	-11 482 909	-11 942 225	-12 419 914	
Debt impairment - Other receivables	-316 859 538	-286 269 472	-233 839 185	-252 524 924	-267 434 023	-278 331 384	-289 256 640	
Debt impairment - Consumer receivables: rates	-38 738 620	-15 046 618	-239 558 330	-258 701 077	-273 974 817	-293 153 054	-313 673 767	
Debt impairment - Consumer receivables: electricity	-28 173 542	-14 004 238	-148 871 614	-160 767 722	-170 259 465	-182 177 628	-194 930 062	
Debt impairment - Consumer receivables: water	-3 521 693	-10 503 179	-290 434 801	-313 643 011	-332 160 528	-355 411 765	-380 290 588	
Debt impairment - Consumer receivables: sewerage	-8 804 232	-17 505 298	-41 119 142	-44 404 910	-47 026 581	-50 318 442	-53 840 732	
Debt impairment - Consumer receivables: refuse	-68 673 009	-73 522 250	-67 650 950	-73 056 815	-77 370 097	-82 786 004	-89 581 024	
Debt impairment - Consumer receivables: other	-	-	-1	-144 458 482	-156 001 943	-165 212 314	-176 277 177	-189 151 579
Collection costs	-171 241 549	-98 993 624	-	-	-	-	-	-
Depreciation & Asset Impairment	-1 464 000 030	-1 620 077 635	-1 961 301 772	-2 106 141 142	-2 225 084 144	-2 336 338 351	-2 453 155 269	
Approved capital projects: Depreciation & Asset Impairment	-	-	-	-60 573 933	-219 923 727	-382 385 132	-1 383 429 424	
Interest paid on external debt	-1 061 586 522	-1 205 642 506	-1 331 590 145	-1 232 807 582	-1 175 139 267	-1 125 634 144	-1 084 349 155	
Interest paid on external debt - New debt	-	-	-41 250 000	-121 559 491	-211 119 051	-255 383 404	-244 259 605	
Bulk Purchases	-8 808 848 636	-9 582 375 815	-10 380 763 782	-11 029 714 744	-11 697 485 008	-12 199 166 356	-12 775 263 771	
Bulk Purchases - Electricity	-6 898 347 008	-7 597 154 111	-7 462 684 400	-7 902 982 800	-8 361 358 800	-8 863 037 148	-9 439 134 563	
Approved capital projects: Bulk Purchases - Electricity	-	-	-	-	-	-	-	-
Bulk Purchases - Water	-1 918 501 628	-1 985 221 704	-2 918 079 382	-3 126 731 944	-3 336 129 208	-3 336 129 208	-3 336 129 208	
Approved capital projects: Bulk Purchases - Water	-	-	-	-	-	-	-	-
Contracted services	-2 466 462 048	-2 248 691 575	-2 053 908 471	-2 032 899 436	-2 229 311 288	-2 363 069 965	-2 504 854 163	
Approved capital projects: Contracted services	-	-	-	-	-	-	-	-
Grants and subsidies paid	-347 060 760	-381 061 824	-49 980 234	-53 438 449	-56 523 218	-59 914 611	-63 509 487	
Repairs and maintenance	-1 428 498 977	-1 061 466 367	-1 197 928 720	-1 366 099 673	-1 526 761 535	-1 633 634 843	-1 747 989 282	
Approved capital projects: Repairs and maintenance	-	-	-	-	-	-	-	-
General expenses	-1 617 017 773	-2 567 778 468	-2 853 563 606	-3 075 258 557	-3 249 921 985	-3 444 917 304	-3 651 612 343	
Approved capital projects: General expenses	-	-	-	-	-	-	-	-
Loss on disposal of PPE	-	-64 865 196	1 062	1 125	1 200	1 272	1 348	
Contributions to 'other' provisions	-64 122 583	-75 963 758	-	-	-	-	-	
<i>Operating expenditure from current activities</i>	-25 444 741 571	-27 558 563 336	-29 909 060 837	-31 738 280 935	-33 717 450 400	-35 417 013 646	-37 274 465 523	
<i>Operating expenditure from approved capital projects</i>	-	-	-	-60 573 933	-219 923 727	-382 385 132	-1 383 299 424	
<i>Operating expenditure from new debt</i>	-	-	-	-41 250 000	-121 559 491	-211 119 051	-255 383 404	-244 259 605
Total operating expenditure (excluding conditional operating and capital grants)	-25 444 741 571	-27 558 563 336	-29 950 310 837	-31 920 414 359	-34 148 493 178	-36 054 782 181	-38 902 154 552	
Accounting Operating Surplus/(Deficit) (excl conditional operating and capital grants)	-1 754 060 123	-1 294 272 907	-1 751 041 226	-1 977 642 779	-2 266 814 476	-2 042 415 266	-2 634 650 794	
Finance income/expenditure adjustments: external Finance Charges & Investment Income	1 005 586 997	1 100 415 213	1 293 347 556	1 279 758 160	1 306 824 336	1 298 406 206	1 245 997 419	
Non-cash adjustments: Depreciation, Debt Impairment & Contribution to other Provisions	2 033 773 113	2 333 857 740	3 137 274 690	3 436 658 228	3 789 928 605	4 149 421 161	5 358 729 000	
Cash Operating Surplus/(Deficit) before working capital adjustments	1 285 299 987	2 140 000 046	2 679 581 020	2 738 773 610	2 829 938 465	3 405 412 101	3 970 075 624	
Consumer Debtors - change	-4 297 946 637	-1 125 707 280	461 071 492	-456 462 661	-478 878 255	-753 689 999	-583 739 606	
Other Debtors - change	130 086 011	-61 483 514	94 946 101	-52 360 265	-50 580 016	-358 921 807	-97 289 934	
Current Portion of Long-Term Receivables - change	6 916 134	-4 244 262	-72 343 908	-13 303 866	-13 996 134	37 712 122	-9 728 993	
Change in Current Assets (Excluding Inventory & Cash)	-4 169 944 492	-1 182 946 532	483 673 685	-52 126 792	-543 454 405	-1 074 899 685	-690 758 534	
Consumer Deposits - change	24 689 856	31 387 379	-11 581 640	7915 106	8 073 408	9 161 687	26 547 405	
Provisions - change	-	-	-	-	-	-	-	-
Creditors - change	2 281 462 316	533 128 314	-1 559 485 766	96 465 816	98 549 859	1 543 575 176	485 711 005	
Conditional Grants and Receipts - change	-40 074 460	130 632 635	-237 120 972	-2 123 485	1 403 452	-	-	
Change in Current Liabilities	2 266 077 712	695 148 328	-1 808 188 378	102 257 236	108 026 719	1 552 736 863	512 258 409	
Change in Inventory	-91 443 913	-115 104 753	-9 599 492	-69 849 408	-76 834 349	111 080 223	-46 699 168	
Change in non-cash/non-standard items (only historic amounts)	1 459 430 557	-826 143 763	-1	-	-	-	-	-
Working capital adjustments	-526 880 136	-1 429 046 720	-1 334 114 184	-489 718 963	-512 262 034	588 917 402	-225 199 293	
Total adjustments	2 512 479 974	2 005 226 233	3 096 508 061	4 226 697 425	4 584 490 907	6 036 744 768	6 379 527 125	
Net Cash operating surplus/(deficit)	758 419 851	710 953 326	1 345 466 835	2 249 054 646	2 317 676 431	3 994 329 503	3 744 876 331	

	Previous year (audited)	Previous year (unaudited)	Current year	MTREF			Longer Term Financial Plan
	2016	2017	2018	2019	2020	2021	2022
Debt service							
Interest earned - Investments	55 999 525	105 227 293	79 492 589	74 608 912	79 433 982	82 611 341	82 611 341
Interest paid on external debt	-1 061 586 522	-1 205 642 506	-1 331 590 145	-1 232 807 582	-1 175 139 267	-1 125 634 344	-1 084 349 155
Interest paid on external debt - New debt			-41 250 000	-121 559 491	-211 119 051	-255 383 404	-244 259 605
Debt repayment - capital	-687 294 188	-732 530 217	-734 692 170	-788 400 914	-906 999 192	-1 016 608 913	-1 110 678 423
Debt repayment - capital - New debt	-	-	-17 460 996	-54 573 498	-100 049 229	-132 109 171	-143 232 970
Net Interest and Debt Funding	-1 692 881 185	-1 832 945 430	-2 045 500 722	-2 122 732 572	-2 313 872 757	-2 447 124 290	-2 499 908 811
Conditional operational grant funding							
Conditional operational grants received (excl Equitable Share allocation)	1 862 436 859	1 948 305 797	2 026 743 871	2 021 229 490	2 086 203 290	2 167 409 083	2 297 453 628
Operational projects							
Maintenance projects	-	-	-	-	-	-	-
Municipal running cost projects	-	-	-	-	-	-	-
Operational projects (typical work streams)	-	-	-	-	-	-	-
Projects on behalf of Local Municipality/Provincial/National Government	-	-	-	-	-	-	-
Operational project expenditure							
Bank overdraft utilised	-	-	-	-	-	-	-
Cash surplus/(deficit) after operational projects	927 975 525	826 313 693	1 326 709 984	2 147 551 565	2 090 006 964	3 714 614 296	3 542 421 149
Capital projects and grant funding							
Conditional capital grants received	2 452 210 170	2 355 387 259	2 449 910 336	2 168 935 510	2 302 280 710	2 554 501 580	2 707 771 675
Capital expenditure - new	-3 968 594 186	-3 232 827 753	-2 744 917 366	-2 983 765 579	-2 734 359 087	-3 246 289 164	-3 541 253 523
Capital expenditure - replacement	-	.996 474 322	-1 039 249 481	-1 255 926 300	-1 778 309 922	-2 056 208 517	
Capital expenditure	-3 968 594 186	-3 232 827 753	-3 741 391 688	-4 023 015 060	-3 990 285 387	-5 024 599 086	-5 597 462 040
Net capital expenditure	-1 516 384 016	-877 440 494	-1 291 481 352	-1 854 079 550	-1 689 004 677	-2 470 097 506	-2 889 690 365
New debt	1 200 000 000	1 000 000 000	1 000 000 000	1 000 000 000	1 300 000 000	-	-
Bank Overdraft - opening balance	-	-	-	-	-	-	-
Bank Overdraft - closing balance	-	-	-	-	-	-	-
Net cash surplus/(deficit)	611 591 509	948 873 199	1 035 228 632	1 293 472 015	1 701 002 287	1 244 516 790	652 730 783
Line items							
	Previous year (audited)	Previous year (unaudited)	Current year	MTREF			Longer Term Financial Plan
	2016	2017	2018	2019	2020	2021	2022
Call Investment Deposits	493 263 328	1 087 430 061	-	-	-	-	-
Cash	57 158 390	74 581 166	-	-	-	-	-
Cash and investments (excl overdraft) - opening balance	550 419 718	1 162 011 227	2 110 884 426	3 146 113 058	4 439 585 073	6 140 587 360	7 385 104 150
Net cash surplus/(deficit)	611 591 509	948 873 199	1 035 228 632	1 293 472 015	1 701 002 287	1 244 516 790	652 730 783
Call Investment Deposits	1 087 430 061	1 712 108 929	-	-	-	-	-
Cash	74 581 166	398 775 497	-	-	-	-	-
Cash and investments (excl overdraft) - closing balance	1 162 011 227	2 110 884 426	3 146 113 058	4 439 585 073	6 140 587 360	7 385 104 150	8 037 834 934